ELMER, ADOLPH DANIEL EDWARD
(1870-1942)

OVERSIZE
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EL-6F

Adolph Daniel Edward Elmer (1870-1942)

Field notes, entries 20003; 1921 through 22694 (1937).

Xerox copy obtained from Dan Nicolson, (US)

National Museum of Natural History · Smithsonian Institution
WASHINGTON, D.C. 20560 · TEL. 202- 381-5801

6 July 1979

Dr. Stephen A. Spongberg
Arnold Arboretum of Harvard University
22 Divinity Avenue
Cambridge, Massachusetts 02138

Dear Steve,

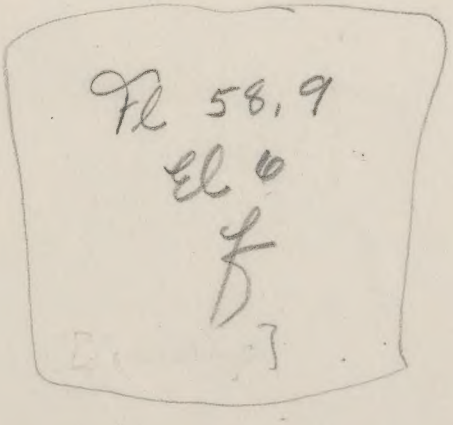
I have decided to accept your offer to permit us to copy the Merrill compilation of Elmer's field notes, 7037-18477a. It probably would be simplest if you could loan the set to me. I will arrange to have it copied here and return your set. Should this be done as an interlibrary loan?

As ever,

Dan

Dan H. Nicolson
Curator
Department of Botany

DHN:el



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Thanks for taking the trouble to locate this.

With best regards,

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Enclosure

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With best regards,

Dan H. Nicolson
Curator
Department of Botany

DHN:ej

Enclosure

20003. [No name.] On host number 20002. [No entry for this collection.] Sandakan, October to December, 1921. [No family given.]

20005. [No name.] On host number 20004. [No entry for this collection.] Sandakan, October to December, 1921. [No family given.]

20015. [No name.] On host number 20013. [No entry for this collection.] Sandakan, October to December, 1921. [No family given.]

20017. [No name.] On host number 20016. [No entry for this collection.] Sandakan, October to December, 1921. [No family given.]

20018. [No name.] On host number 20007. [No entry for this collection.] Sandakan, October to December, 1921. [No family given.]

20019. [No name.] On host number 20007. [No entry for this collection.] Sandakan, October to December, 1921. [No family given.]

20021. [No name.] On host number 20020. [No entry for this collection.] Sandakan, October to December, 1921. [No family given.]

20023. [No name.] On host number 20022. [No entry for this collection.] Sandakan, October to December, 1921. [No family given.]

20029. [No name.] On host number 20028. [No entry for this collection.] Sandakan, October to December, 1921. [No family given.]

20035. [No name.] On host number 20034. [No entry for this collection.] Sandakan, October to December, 1921. Crypt.

20035. [No name.] On host number 20034. [No entry for this collection.] Sandakan, October to December, 1921. Crypt.

20040. [No name.] On host number 20039. [No entry for this collection.] Sandakan, October to December, 1921. Crypt.

20042. [No name.] On host number 20041. [No entry for this collection.] Sandakan, October to December, 1921. Crypt.

20045. [No name.] On host number 20044. [No entry for this collection.] Sandakan, October to December, 1921. Crypt.

20046. [No name.] On host number 20030. [No entry for this collection.] Sandakan, October to December, 1921. Crypt.

20057. [No name.] On host number 20056. [No entry for this collection.] Sandakan, October to December, 1921. Crypt.

20060. [No name.] On host number 20059. [No entry for this collection.] Sandakan, October to December, 1921. Crypt.

20061. [No name.] On host number 20059. [No entry for this collection.] Sandakan, October to December, 1921. Crypt.

20062. [No name.] On leaves of a Pandan in thickets of saline ground; host 20074 [no entry for this collection]. Sandakan, October to December, 1921. Crypt.

20069. [No name.] On host number 20068. [No entry for this collection.] Sandakan, October to December, 1921. Crypt.

20071. [No name.] On host number 20070. [No entry for this collection.] Sandakan, October to December, 1921. Crypt.

20072. [No name.] On host number 20063. [No entry for this collection.] Sandakan, October to December, 1921. Crypt.

20075. [No name.] On host number 20074. [No entry for this collection.] Sandakan, October to December, 1921. Crypt.

20077. [No name.] On dead as well as on living branchlets of trees in jungles near nipas; mats spreading, spore sacks on the upper side. Sandakan, October to December, 1921. Crypt.

20080. [No name.] On host number 20079. [No entry for this collection.] Sandakan, October to December, 1921. Crypt.

20084. [No name.] On host number 20083. [No entry for this collection.] Sandakan, October to December, 1921. Crypt.

20087. [No name.] On host number 20085. [No entry for this collection.] Sandakan, October to December, 1921. Crypt.

20089. [No name.] On dead but still standing stems near the ground of host 20088 [no entry for this collection]. Sandakan, October to December, 1921. Crypt.

20095. [No name.] On low plants near the wet ground of dense woods (of the doxas family?). Sandakan, October to December, 1921. Moss?

20096. [No name.] On dead leaves of Smilax. Sandakan, October to December, 1921. Crypt.

20103. [No name.] On host number 20098. [No entry for this collection.] Sandakan, October to December, 1921. Crypt.

20105. [No name.] On host number 20104. [No entry for this collection.] Sandakan, October to December, 1921. Crypt.

20107. [No name.] On host number 20106. [No entry for this collection.] Sandakan, October to December, 1921. Crypt.

20111. [No name.] On host number 20110. [No entry for this collection.] Sandakan, October to December, 1921. Crypt.

20113. [No name.] On dead leaves near the ground of stemless(?) Pandan on the edge of nipa swamp. Sandakan, October to December, 1921. Crypt.

20127. [No name.] On the main branches of host 20125 [no entry for this collection]. Sandakan, October to December, 1921. Crypt.

20133. [No name.] On host number 20130. [No entry for this collection.] Sandakan, October to December, 1921. Crypt.

20151. [No name.] On host number 20150. [No entry for this collection.] Sandakan, October to December, 1921. Crypt.

20157. Polyporus rubidus. Along sides of logs in grass lands; the plates are bendable and lighter in color beneath, forming horizontal colonies. Sandakan, October to December, 1921. Crypt.

20164. Stereum. Upon dead trunks on wet ground in damp woods; cups dirty brown, thin, tough, very flexible. Sandakan, October to December, 1921. Crypt.

20165. Polystictus. Upon small dead limbs on the ground in jungled woods; the flat plates chalky white on both sides, rather watery or water soaked. Sandakan, October to December, 1921. Crypt.

20174. [No name.] On fallen leaves upon humus covered ground of Macaranga tree (see number collected). Sandakan, October to December, 1921. Crypt.

20176. Trametes or Polyporus? On logs in damp woods; plates bendable, yellowish above, dull chalky white beneath. Sandakan, October to December, 1921. Crypt.

20185. Polystictus affinis. On limbs lying upon the ground in woods; stipes erect, spongy; plates brown above, nearly chalky white beneath. Sandakan, October to December, 1921. Crypt.

20190. Fomes tricolor. On sides of big logs in wet woods; plates thick, hard, up to 4 inches wide, light brown beneath. Sandakan, October to December, 1921. Crypt.

20191. Fomes albo-marginatus. On sides of large logs in wet woods; plates deep brown above, sulphur brown beneath, bendable, up to 6 inches wide. Sandakan, October to December, 1921. Crypt.

20201. [No name.] On host 20200. [No entry for this collection.] Sandakan, October to December, 1921. Crypt.

20206. [No name.] On host 20204. [No entry for this collection.] Sandakan, October to December, 1921. Crypt.

20207. Polyporus bicolor. On dead limbs upon the ground of damp woods; plates running along the lower side, yellow, flexible, not watery. Sandakan, October to December, 1921. Crypt.

20216. [No name.] On host 20215. [No entry for this collection.] Sandakan, October to December, 1921. Crypt.

20224. Ganoderma applanatum (Pers.) Pat. var. philippinense Humph. Det. Humphrey. On side of large log in woods; plate hard, woody, 1 foot across, very deep brown beneath, yellowish brown coated above. Sandakan, October to December, 1921. Crypt.

[CJH note: "Spores 5.6-5.9 x 8.5-9.2 μ; av. 5.8 x 8.7 μ
Pore hyphae 2.1-5.6 μ; av. 3.2 μ
Context hyphae 2.1-6.3 μ; av. 4.1 μ"]

20225. Polyporus licnoides. Along side of logs in woods; plates with a tendency to spread all over the lower side where the log lies above ground, deep brown beneath, blackish brown above, quite rigid for its thickness. Sandakan, October to December, 1921. Crypt.

20232. [No name.] On host number 20231. [No entry for this collection.] Sandakan, October to December, 1921. Crypt.

20233. [No name.] On host number 20231. [No entry for this collection.] Sandakan, October to December, 1921. Crypt.

20240. [No name.] On leaves of yellow flowered Dillenia (see specimen number). Sandakan, October to December, 1921. Crypt.

20244. [No name.] On host number 20243. [No entry for this collection.] Sandakan, October to December, 1921. Crypt.

20245. Polyporus discolor. On half decayed limbs in dense woods; plates dry, bendable, grayish above, brown beneath. Sandakan, October to December, 1921. Crypt.

20253. [No name.] On host of Melastomataceae with reddish brown stem, mottled calyx fruits and pale blue flowers (see specimen number). Sandakan, October to December, 1921. Crypt.

20263. [No name.] On limbs of host 20262. [No entry for this collection.] Sandakan, October to December, 1921. Crypt.

20264. [No name.] On limbs of host 20262. [No entry for this collection.] Sandakan, October to December, 1921. Crypt.

20267. [No name.] On host number 20266. [No entry for this collection.] Sandakan, October to December, 1921. Crypt.

20270. [No name.] On leaves of Smilax; spots yellowish brown to nearly black when old. Sandakan, October to December, 1921. Crypt.

20273. [No name.] On limbs of host 20262. [No entry for this collection.] Sandakan, October to December, 1921. Crypt.

20274. [No name.] On stems of slender trees in damp woods. Sandakan, October to December, 1921. Moss.

20281. [No name.] On the older leaves of host 20280. [No entry for this collection.] Sandakan, October to December, 1921.

20286. Polystictus occidentalis. On a log lying across a small ravine in dry woods; plates bendable, yellowish white beneath, yellowish gray above. Sandakan, October to December, 1921. Crypt.

20288. [No name.] On host number 20285. [No entry for this collection.] Sandakan, October to December, 1921.

20291. [No name.] On host number 20290. [No entry for this collection.] Sandakan, October to December, 1921. Crypt.

20292. [No name.] On host number 20290. [No entry for this collection.] Sandakan, October to December, 1921. Crypt.

20296. [No name.] On dried leaves of host 20293. [No entry for this collection.] Sandakan, October to December, 1921. Crypt.

20304. [No name.] On the smaller branches of host 20303. [No entry for this collection.] Sandakan, October to December, 1921.

20305. [No name.] On host number 20303. [No entry for this collection.] Sandakan, October to December, 1921. Crypt.

20312. [No name.] On host number 20311. [No entry for this collection.] Sandakan, October to December, 1921. Crypt.

20317. [No name.] On host number 20311. [No entry for this collection.] Sandakan, October to December, 1921. Crypt.

20327. [No name.] On host number 20326. [No entry for this collection.] Sandakan, October to December, 1921.

20328. Irene. On young stems near the wet ground of the broad leafed climbing Bamboo (see specimen number). Sandakan, October to December, 1921. Crypt.

20330. [No name.] On the older leaves of the broad leafed climbing bamboo (see specimen number). Sandakan, October to December, 1921. Crypt.

20337. [No name.] On big leafed Macaranga (see specimen number). Sandakan, October to December, 1921. Crypt.

20342. [No name.] On host number 20341. [No entry for this collection.] Sandakan, October to December, 1921.

20343. [No name.] On host number 20332. [No entry for this collection.] Sandakan, October to December, 1921.

20345. [No name.] On host number 20340. [No entry for this collection.] Sandakan, October to December, 1921. Crypt.

20354. Stereum. On nearly decayed limbs upon wet ground in damp woods; plates thin, yellow below, yellowish above. Sandakan, October to December, 1921. Crypt.

20360. Taxithelium argentatum Broth. On nearly decayed hardwood log, forming mats, the stalks brown and erect. Sandakan, October to December, 1921. Moss.

20366. Polyporus. In wet humus covered ground in very damp flats, scattered but restricted in certain areas only; stipes dirty brown, bendable; plate dead foliage color above, greenish yellow beneath, very irregular in size and shape. Sandakan, October to December, 1921. Crypt.

20367. Polyporus uribius. On half decayed timbers in a low densely wooded flat; plates brighter yellow above, the margins and nether side of the younger ones whitish. Sandakan, October to December, 1921. Crypt.

20368. Polyporus ploscasus. Horizontally crowded upon a half decayed small tree trunk in wet dense woods; plates quite flexible, grayish brown above, dark fumosus beneath. Sandakan, October to December, 1921. Crypt.

20372. [No name.] On host number 20371. [No entry for this collection.] Sandakan, October to December, 1921. Crypt.

20374. [No name.] On host number 20373. [No entry for this collection.] Sandakan, October to December, 1921. Crypt.

20385. [No name.] On host number 20384. [No entry for this collection.] Sandakan, October to December, 1921. Crypt.

20390. Polyporus vinosus Berk. [No description.] Sandakan, October to December, 1921. Crypt.

20391. Hexagona discopoda. [No description.] Sandakan, October to December, 1921. Crypt.

20392. Polystictus murinus. [No description.] Sandakan, October to December, 1921. Crypt.

- -

20412. [No name.] On host number 20411. [No entry for this collection.] Tawao, October 1922 to March 1923. [No family given.]

20444. [No name.] On host number 20436. [No entry for this collection.] Tawao, October 1922 to March 1923. Crypt.

20445. [No name.] On rotten roots of stumps; stalks very spongy and tough, the cap dingy white. Tawao, October 1922 to March 1923. Crypt.

20446. Fomes. On side of logs in woods; plate up to 1 foot across, bendable, yellowish brown. Tawao, October 1922 to March 1923. Crypt.

20447. Fomes melanoporus Mont.
20447a. Fomes lamaoensis Murr. Mixture. On side of log in forests; plates 6 inches across, rigid, blackish. Tawao, October 1922 to March 1923. Crypt.

[CJH note: "The purplish black specimen 20447 is Fomes melanoporus Mont. The others (20447a) are Fomes lamaoensis Murr."]

20448. Lycoperdon. On rather dry compact ground along trail; larger ones 1 inch across, dull yellowish gray, smoke greenish. Tawao, October 1922 to March 1923. Crypt.

20461. Marasimus. In humus or decayed wood on the ground of dense forests; stems few to several clustered, erect, brown except toward the whitish top; cap thin, creamy white, the sides drooping, quite dry. Tawao, October 1922 to March 1923. Crypt.

20486. Polyporus rubidus. Along sides of a log in dry forests; plates bendable, similarly yellowish brown on both sides. Tawao, October 1922 to March 1923. Crypt.

20491. [No name.] On leaves of Mucuna number 20416 [type of M. elmeri Merr.: no entry for this collection]. Tawao, October 1922 to March 1923. Crypt.

20495. [No name.] On limbs of host number 20494. [No entry for this collection.] Tawao, October 1922 to March 1923. Crypt.

20496. Hymenachacte. On rotten logs in dense jungles; plates dark yellowish brown on both sides, thin and rather dry. Tawao, October 1922 to March 1923. Crypt.

20497. Trametes persoonii. On logs in damp woods; plates bendable, blackish brown above, yellowish white beneath. Tawao, October 1922 to March 1923. Crypt.

20498. Polyporus licnoides? Sides of logs in moist woods; plates thick, rigid, tightly attached by its thick base, dirty brown above, a sort of dull yellowish brown beneath. Tawao, October 1922 to March 1923. Crypt.

20499. Polyporus zonalis? On dead timbers in very humid woods; plates quite bendable or flexible, yellowish brown above, of a dull blue color beneath. Tawao, October 1922 to March 1923. Crypt.

20509. [No name.] On host number 20508. [No entry for this collection.] Tawao, October 1922 to March 1923. Crypt.

20514. Stereum. On decayed wood lying upon wet ground of jungles; plates tough, few to several, arranged in a rosette, ashy gray, or yellowish beneath. Tawao, October 1922 to March 1923. Crypt.

20515. Lophopetalum. [L. javanicum dupl. det. D. Hou. 1915.] Small tree in well drained forests; stem 8 inches thick; wood whitish, moderately soft or hard; bark smooth, grayish white mottled; leaves slightly paler beneath, the angular twigs green; inflorescence pale or yellowish green, terminal, in dense masses a foot across. Tawao, October 1922 to March 1923. [Celastrac.]

20522. [No name.] On host number 20518 [no entry for this collection]; the upper side of the leaves are sometimes entirely covered with black. Tawao, October 1922 to March 1923. Crypt.

20523. [No name.] On host number 20515 [Lophopetalum javanicum]; spots reddish tinged. Tawao, October 1922 to March 1923. Crypt.

20524. Nidularia or Cyathus. Upon half decayed wood lying upon damp earth of dense forests; cups in dense colonies, erect, soft brown. Tawao, October 1922 to March 1923. Crypt.

20537. Fomes. On sides of large living tree trunks in dense forests; plates flat, from 1 to 5 inches across, circular in general outline, light, scattered and appearing plastered upon the tree from the ground up to 40 feet, dark yellowish brown on the back, lighter yellowish brown on the exposed outer side. Tawao, October 1922 to March 1923. Crypt.

20538. Theliphora. [Thelephora] Encircling small stems in deep woods; plates thin, brownish black above, near the ground or just above the humus layer, blackish blue beneath. Tawao, October 1922 to March 1923. Crypt.

20539. Panus rudis. On dead timbers in damp forests; plates spongy, yellowish brown above, much lighter so beneath. Tawao, October 1922 to March 1923. Crypt.

20541. [No name.] On the lower or older leaves of host number 20540 [no entry for this collection]. Tawao, October 1922 to March 1923. Crypt.

20554. Agaricus. On logs of rocky damp ravines; spongy, the stalk and cap purplish, the latter rough on the top and its gills beneath yellow. Tawao, October 1922 to March 1923. Crypt.

20555. [No name.] On ground near large stones in an open ravine of thickets; foliage green or yellowish so; the fruiting capsules erect. Tawao, October 1922 to March 1923. Crypt.

20566. Lenzites. On sides of logs in clearings but in damp rocky ravines; plates pliable, nearly chalky white on both sides. Tawao, October 1922 to March 1923. Crypt.

20567. Lentinus connatus. On rotten limbs in dense humid jungles; stems erect spongy, dull white as is also the much divided and more or less twisted or curved similarly colored plates. Tawao, October 1922 to March 1923. Crypt.

20578. [No name.] On leaves of host number 20573 [no entry for this collection]. Tawao, October 1922 to March 1923. Crypt.

20579. Daldinia. Along sides of half decayed timbers in damp ravines; balls 1/2 to 2 inches across, reddish brown, giving off coal black dust (?), tightly attached and quite hard. Tawao, October 1922 to March 1923. Crypt.

20580. Polystictus occidentalis. On sides of large logs lying in wet thickets; plates a little broader than long, flexible, dull yellowish brown above, of a yellowish white beneath. Tawao, October 1922 to March 1923. Crypt.

20581. Trametes. In colonies along sides of small logs lying upon the ground in thickets; plates flexible, earthy color above, of a glaucous gray beneath. Tawao, October 1922 to March 1923. Crypt.

20598. [No name.] On host number 20592 [no entry for this collection]; minute dots well scattered and numerous. Tawao, October 1922 to March 1923. Crypt.

20603. Polystictus affinis. On nearly rotten logs lying in damp ground of dense forests; plates distinctly stalked, yellowish brown above, nearly chalky white beneath; very pliable. Tawao, October 22 to March 1923. Crypt.

20608. [No name.] On host number 20607. [No entry for this collection.] Tawao, October 1922 to March 1923. Crypt.

20611. [No name.] On host number 20610. [No entry for this collection.] Tawao, October 1922 to March 1923. Crypt.

20613. [No name.] On host number 20612. [No entry for this collection.] Tawao, October 1922 to March 1923. Crypt.

20617. Hymenachaete subpurpurascens Ckc. On dead half rotten stumps of very damp jungles; plates rigid and easily breaking, very irregular and inclined to run, very dark yellowish brown on both sides. Tawao, October 1922 to March 1923. Crypt.

20618. Trametes. On rotten stumps in dense thickets; plates rigid, tightly attached, whitish on both sides but turning creamy yellow beneath, and on the top blackish from the base outwards. Tawao, October 1922 to March 1923. Crypt.

20621. [No name.] On host number 20620. [No entry for this collection.] Tawao, October 1922 to March 1923. Crypt.

20630. [No name.] On host number 20624. [No entry for this collection.] Tawao, October 1922 to March 1923. Crypt.

20631. Polyporus rubidus. Along dry logs in woods near tide water; plates dry, bendable, smooth and avellaneous above, yellowish brown beneath. Tawao, October 1922 to March 1923. Crypt.

20641. [No name.]. On host number 20640. [No entry for this collection.] Tawao, October 1922 to March 1923. Crypt.

20642. Lentinus. On dead logs in moist woods; stem erect, spongy, the whitish cups deeply funnel shaped, turning yellowish when dry. Tawao, October 1922 to March 1923. Crypt.

20643. Hymenachaete subpurpurascens Cke. Upon large stumps in dense woods; plates dry, yellowish brown above, earthy black beneath, very irregular or rugose, brittle, running and forming dense masses. Tawao, October 1922 to March 1923. Crypt.

20646. Daedalea repanda. On dead logs in dense jungles; plates broader than long, very flexible but not wet, chalky white above, the much corrugated gills yellowish white. Tawao, October 1922 to March 1923. Crypt.

20651. [No name.] Profusely covering the upside of branches of small trees and shrubs in a very moist rocky forested ravine; foliage pale green, the tips of branches ascendingly curved. Tawao, October 1922 to March 1923. Scale-moss.

20654. [No name.] On host number 20653. [No entry for this collection.] Tawao, October 1922 to March 1923. Crypt.

20655. [No name.] On host number 20647. [No entry for this collection.] Tawao, October 1922 to March 1923. Crypt.

20656. [No name.] On host number 20650. [No entry for this collection.] Tawao, October 1922 to March 1923. Crypt.

20657. Fomes. Around the basal or ground portion of smooth living tree trunks in very damp forests; plates irregular, one upon another, rather thick but not hard, yellowish brown on both sides. Tawao, October 1922 to March 1923. Crypt.

20658. Polyporus tabacinus. Along dry logs in moist woods; plates thin, easily breaking, dull yellowish brown, more yellow beneath than above. Tawao, October 1922 to March 1923. Crypt.

20661. Trametes versatilis. Upon dry logs a few feet above ground in jungles; plates dry, very flexible, grayish white above, dark brown beneath. Tawao, October 1922 to March 1923. Crypt.

20662. Ganoderma williamsianum Murr. and Polyporus licnoides Mont. Mixture. Along the lower side of dead dry woody vines, upon boulders of damp forests; plates dry bendable, the lower side dark or chocolate brown, the thickened margins yellowish so. Tawao, October 1922 to March 1923. Crypt.

[CJH notes: "Notes apply to Polyporus lecnoides Mont. The check specimen is Ganoderma Williamsianum Murr.

"Ganoderma Williamsianum Murr.
Spores 9.2-9.6 x 12.4-13 μ; av. 9.4 x 12.8μ
Pore hyphae 1.7-6.3 μ; av. 3.7 μ
Context hyphae 2.1-7.1 μ; av. 4 μ"]

20667. [No name.] On host number 20666. [No entry for this collection.] Tawao, October 1922 to March 1923. Crypt.

20670. [No name.] On host number 20669. [No entry for this collection.] Tawao, October 1922 to March 1923. Crypt.

20676. Trametes aspera. On dry timbers or logs in dry woods; plates dry, yellowish brown above, tough, fumosus beneath. Tawao, October 1922 to March 1923. Crypt.

20685. Polyporus bicolor. Along the lower side of dry rotten limbs in woods; plates running, dry, flexible, chocolate brown. Tawao, October 1922 to March 1923. Crypt.

20688. Daedalea. On cut edges of old logs in wet forests; plates stiff, above earth color except the whitish border, beneath chalky white. Tawao, October 1922 to March 1923. Crypt.

20689. Polystictus xanthopus. Upon dry half decayed limbs in forests; stipe erect, whitish, spongy but quite rigid; cap shining brown above, beneath chalky white, the concave top holding water. Tawao, October 1922 to March 1923. Crypt.

20692. Lentinus praerigidus. Upon sides of logs some distance above ground; plates pliable, yellowish beneath, grayish white above. Tawao, October 1922 to March 1923. Crypt.

20693. Lentinus. Along the gills of host 20692 [Lentinus praerigidus]; the small heads light yellow, but soon turning nearly black or the same color as their filamentous stalks; hands became covered with the blackish spore powder. Tawao, October 1922 to March 1923. Crypt.

20696. Agaricus. Dainty toad-stools in open grass covered ground near my house; erect, soft, scattered, the head dark velvety red, the gills with a yellowish tinge. Tawao, October 1922 to March 1923. Crypt.

20700. [No name.] On host number 20699. [No entry for this collection.] Tawao, October 1922 to March 1923. Crypt.

20715. [No name.] On host number 20714. [No entry for this collection.] Tawao, October 1922 to March 1923. Crypt.

20717. [No name.] On host number 20713. [No entry for this collection.] Tawao, October 1922 to March 1923. Crypt.

20728. Polyporus murinus? Along sides of large logs; plates flexible, dingy white beneath, light gray above. Tawao, October 1922 to March 1923. Crypt.

20729. Polystictus. On sides of nearly rotten logs upon the wet ground; plates spongy but not wet, light brown beneath, dull brown above. Tawao, October 1922 to March 1923. Crypt.

20730. Fomes tricolor. [Shrub description crossed out.] Heavy brown wood fungus. Tawao, October 1922 to March 1923. Crypt.

20743. Polyporus durus. On sides of a nearly rotten snag in damp woods; plates quite rigid yet bendable, dry, fumosus on both sides; easily detached. Tawao, October 1922 to March 1923. Crypt.

20762. [No name.] On host number 20757. [No entry for this collection.] Tawao, October 1922 to March 1923. Crypt.

20763. Hymenochaete cracineos. Along the lower sides of a rotten log in dense forests; the masses run longitudinally and are of a cinnamon brown. Tawao, October 1922 to March 1923. Crypt.

20764. Polyporus fruticum? Thick somewhat sponsy masses half way encircling small stems in dense forests; the upper rounded side dark yellow, the lower more or less flat side yellowish brown. Tawao, October 1922 to March 1923. Crypt.

20772. [No name.] On host number 20770. [No entry for this collection.] Tawao, October 1922 to March 1923. Crypt.

20773. [No name.] On host number 20766. [No entry for this collection.] Tawao, October 1922 to March 1923. Crypt.

20774. Trametes meyenei. Continuous masses along the nether side of a dead half rotten tree trunk; patches flexible, dry, chalky white. Tawao, October 1922 to March 1923. Crypt.

20775. Polyporus. Scattered along sides of a nearly rotten small stem; plates dry, quite rigid, smooth and similarly brown on both sides. Tawao, October 1922 to March 1923. Crypt.

20783. Hymenogramme? Along the lower side of a large nearly rotten limb upright in position; the solid and even masses chalky white or turning yellowish when old. Tawao, October 1922 to March 1923. Crypt.

20784. Trametes. On sides of logs of wet ground; plates scattered, brown above, fumosous beneath, the edges whitish. Tawao, October 1922 to March 1923. Crypt.

20785. Stereum perlatum. On a rotten branch of damp woods; plates inclined to run, thin, yellow, turning brownish when old. Tawao, October 1922 to March 1923. Crypt.

20797. Polystictus. Thin plates scattered along a dry decayed limb; yellowish brown beneath, the older portion on the top gray. Tawao, October 1922 to March 1923. Crypt.

20798. Polyporus arabus Burk. On small dry dead limbs in a damp forested ravine; plates bendable, dry, light yellow on both sides. Tawao, October 1922 to March 1923. Crypt.

20799. Polyporus semilaccatus? Rather rigid scattered plates upon a standing small stump in woods, hard thickened at the base, yellowish brown on both sides, its edge nearly white. Tawao, October 1922 to March 1923. Crypt.

20811. Fomes. A very pale yellow or yellowish brown to gray, upon the bark of large tree trunks up to 30 feet above ground or as far as protected by the jungle woods; plates 3 to 5 inches across, irregular but more or less circular in outline (very much resembling the lighter colored blotches of the peeled bark of the living tree), the lower end of the plates tight to the bark, but the upper portion free from the bark. Tawao, October 1922 to March 1923. Crypt.

20816. [No name.] On host number 20815. [No entry for this collection.] Tawao, October 1922 to March 1923. Crypt.

20822. Hexagona discopoda. On decayed but dry limbs in forests; plates thin, yellowish brown on both sides. Tawao, October 1922 to March 1923. Crypt.

20846. Trametes versatilis. Colonies along half decayed logs in open clearings; plates running, diverse in size, often single, yellowish brown beneath, above grayish blue especially along the edges; heavy and wet with rains. Tawao, October 1922 to March 1923. Crypt.

20852. [No name.] On host number 20851 [no entry for this collection]; masses usually along the upper side of the larger branches, grayish green. Tawao, October 1922 to March 1923. Crypt.

20891. [No name.] On host number 20883. [No entry for this collection.] Tawao, October 1922 to March 1923. Crypt.

20901. Trametes. Along sides of a partly decayed log in wet dense jungles; plates dry but pliable, brown on both sides, edges whitish. Tawao, October 1922 to March 1923. Crypt.

20902. [No name.] On host number 20899. [No entry for this collection.] Tawao, October 1922 to March 1923.

20926. Trametes tenuo-rosea Lloyd. On sides of half decayed logs in jungles near tide water; plates dry, ochroleneous on both sides, inclined to run below the log. Tawao, October 1922 to March 1923. Crypt.

20927. Fomes lamaensis Murr. Hard and brittle patches on sides of a dead hardwood trunk; patches badius to nearly black; covering large solid areas. Tawao, October 1922 to March 1923. Crypt.

20928. Polyporus tabacinus. Along sides of a partly decayed log in dense thickets; plates thin, dry, latericus. Tawao, October 1922 to March 1923. Crypt.

20937. Polyporus. Running along the nether side of large rotten limbs of a wet forested flat; plates luteus above, ochraceus beneath, very pliable and spongy, water soaked. Tawao, October 1922 to March 1923. Crypt.

20938. Polystictus murinus. On dead half decayed branches in densely shaded forests; plates dry, pliable, chalky white below, griseus above but with whitish bands and edges. Tawao, October 1922 to March 1923. Crypt.

20939. Lentinus. Upon a rotten piece of timber lying upon wet ground of dense forests; stipe and upper deeply sunken pilea umbrinus, the gills lighter brown, erect, spongy and tightly attached, the inverted funnel head holding rain water. Tawao, October 1922 to March 1923. Crypt.

20940. Polyporus opisthopus. Along the sides of a dead yet standing small tree trunk in dense woods; plates dry and rather hard or rigid, easily detached, edges recurved, numerous up to 2 yards above ground, castaneus on both sides. Tawao, October 1922 to March 1923. Crypt.

20950. Trametes persoonii. On dry dead but standing small tree stump or rather stem, in humid woods; plates quite rigid for their thickness, dry, melleus beneath, the top nearly black except the chalky white marginal band. Tawao, October 1922 to March 1923. Crypt.

20951. [No name.] On limbs of host number 20942. [No entry for this collection.] Tawao, October 1922 to March 1923. Crypt.

20952. [No name.] On limbs of host number 20942. [No entry for this collection.] Tawao, October 1922 to March 1923. Crypt.

20960. Ganoderma resinosus. Upon dead timbers of damp dense woods; plates dry, bendable, yellowish white beneath, shining black above. Tawao, October 1922 to March 1923. Crypt.

20961. Polyporus murinus. On decayed logs in humid forests; plates usually with a short spongy stipe, horizontal, bendable, yellowish white beneath, above fumosus except the chalky white margin, very distinctly band marked. Tawao, October 1922 to March 1923. Crypt.

20964. [No name.] On host number 20963. [No entry for this collection.] Tawao, October 1922 to March 1923. Crypt.

20972. Polyporus. Along the basal portion of a dead small tree trunk, in humid forests; plates thick, cookie-like, quite easily broken, melleus above, creamy white beneath. Tawao, October 1922 to March 1923. Crypt.

20979. [No name.] On host number 20978. [No entry for this collection.] Tawao, October 1922 to March 1923. Crypt.

20985. Polyporus virgatus. Upon a large somewhat rotten log in dense jungles; stipe erect, spongy, tightly attached; cap depressed, flexible but not watery, fumosus above, beneath of a dull yellowish white. Tawao, October 1922 to March 1923. Crypt.

20986. Fomes lignosus. Hard and rigid plates upon a dead stump in humid woods; depressed above, dirty or grayish white beneath yellowish brown. Tawao, October 1922 to March 1923. Crypt.

20992. Trametes aurora Ces. Upon rotten logs in deep forests; plates bendable, dry, yellowish white beneath, castaneous above though the marginal portion is of a lighter brown. Tawao, October 1922 to March 1923. Crypt.

21003. Lentinus praerigidus. Upon log across a stream in humid woods; stipe spongy, tightly attached, gray, erect; the funnel shaped cap brown, the laminar lighter or yellowish brown. Tawao, October 1922 to March 1923. Crypt.

21005. [No name.] On host number 21004. [No entry for this collection.] Tawao, October 1922 to March 1923. Crypt.

21033. [No name.] On host number 21030. [No entry for this collection.] Tawao, October 1922 to March 1923. Crypt.

21068. [No name.] On host number 21062. [No entry for this collection.] Tawao, October 1922 to March 1923. Crypt.

21069. [No name.] On host number 21058. [No entry for this collection.] Tawao, October 1922 to March 1923. Crypt.

21085. Polyporus (Inonatus [sp.?]. Around the base of a small tree stem in forests near a stream; plates very numerous, the upper ones smaller, quite rigid, running transversely and more or less connected vertically, luteus except the brown lower spore face, especially when old. Tawao, October 1922 to March 1923. Crypt.

21141. [No name.] On host number 21126. [No entry for this collection.] Tawao, October 1922 to March 1923. Crypt.

21151. [No name.] On host number 21150. [No entry for this collection.] Tawao, October 1922 to March 1923. Crypt.

21202. [No name.] Pale sulphureous bunches growing upon rotten Diospyros fruits only (even upon the seeds), erect, soft in texture and emitting a yellow dust when touched; on host number 21204 [no entry for this collection, but reported as D. sulnensis by Merr., 1929]. Tawao, October 1922 to March 1923. Crypt.

21206. [No name.] On host number 21204. [No entry for this collection.] Tawao, October 1922 to March 1923. Crypt.

21209. Lentinus. Erect in humid forests upon rotten matter; cap umbrella shaped, yellow beneath, brownish above. Tawao, October 1922 to March 1923. Crypt.

21210. Lentinus. Erect upon humus of deep forests; stem quite rigid but spongy; cap brown, very narrow and deeply funnel-shaped, the edges much recurved. Tawao, October 1922 to March 1923.

21217. Fomes leprosus. Upon standing dead tree trunks in heavy forests; plates thick, dingy white above, yellowish beneath. Tawao, October 1922 to March 1923. Crypt.

21230. [No name.] On host number 21229. [No entry for this collection.] Tawao, October 1922 to March 1923. Crypt.

21241. [No name.] On host number 21240. [No entry for this collection.] Tawao, October 1922 to March 1923.

21247. Fomes lignosus. Scattered plates on the ground portion of dead standing tree in damp forests, bendable, dirty white above, very dark yellow beneath. Tawao, October 1922 to March 1923. Crypt.

21248. Polyporus sanguineus. Along dead logs in clearings; plates quite flexible, dry, similarly red on both sides, when wet coloring one's hands in the handling of them. Tawao, October 1922 to March 1923. Crypt.

21249. Fomes pullageri? Upon large limbs in woods; plates thick or cushion-like, hard, dry, dull yellow beneath, brownish so above. Tawao, October 1922 to March 1923. Crypt.

21254. Amauroderma ater (Lloyd). Along rotten logs in very humid densely forested flats; plates rather thin and dry, coal black above, chalky white beneath, which surface when touched or rubbed turns dull red and often a few hours coal black while the untouched portion remains white during this period; in handling it wet it colors one's fingers black. Tawao, October 1922 to March 1923. Crypt.

21259. [No name.] On host number 21257. [No entry for this collection.] Tawao, October 1922 to March 1923. Crypt.

21265. Lenzites. Along sides of logs in the rubber plantation of the Kuhara Estate; plates dry, quite flexible, chalky white on both sides. Tawao, October 1922 to March 1923. Crypt.

21266. Stereum papyraceum. Along the lower side of half decayed limbs in an inclining position of forests; plates running, the sides with free ends, thin, very pliable, dull yellow. Tawao, October 1922 to March 1923. Crypt.

21267. Stereum. Along the lateral and lower side of nearly rotten limbs in humid woods; plates thin, very pliable, grayish brown above and with purplish blue edges, beneath yellowish brown, conspicuously rugose. Tawao, October 1922 to March 1923. Crypt.

21274. [No name.] On host number 21270. [No entry for this collection.] Tawao, October 1922 to March 1923. Crypt.

21279. Xylaria
grayish brown, while the clavate head is grayish-white. Tawao, October 1922 to March 1923. Crypt.

21293. Auricularia rugosissima. Along sides of large logs in clearings; plates running, very soft and flexible though dry, grayish above, yellowish brown beneath whose surface is rugulose. Tawao, October 1922 to March 1923. Crypt.

21294. Hymenochaete subpurpurascens Cke. Upon dead standing tree trunks in forests; dense colonies, diverse in size and very irregularly rugose, dry and brittle, dull or dark brown except the yellowish margin. Tawao, October 1922 to March 1923. Crypt.

21339. [No name.] On host number 21333. [No entry for this collection.] Tawao, October 1922 to March 1923. Crypt.

21340. Trametes tenuo-rosea Lloyd. On nearly decayed logs in a very humid wooded ravine; plates dry, fumosus above, more yellowish gray or brown beneath. Tawao, October 1922 to March 1923. Crypt.

21341. Polyporus durus. Upon rotten logs lying on muddy ground of wet forests; plates rigid, bluish brown beneath, bluish gray above. Tawao, October 1922 to March 1923. Crypt.

21342. Polyporus grammocephalus. On limbs of dry forests; plates quite flexible, dry, duller yellow beneath, with recurved margins. Tawao, October 1922 to March 1923. Crypt.

21343. Polystictus occidentalis. On half decayed logs or limbs upon wet soggy soil of clearings; plates yellowish gray and shaggy above, creamy yellow below, flexible. Tawao, October 1922 to March 1923. Crypt.

21353. [No name.] On leaves of a Myrsinaceae? Tawao, October 1922 to March 1923. Crypt.

21356. Hexagona discopoda. Upon rotten limbs in dense humid forests; plates thin, dry, lighter yellowish brown above. Tawao, October 1922 to March 1923. Crypt.

21359. Trametes pusilla. Upon dry fence posts along forest edge of clearings; plates dry, tough, tightly attached, umbrinus. Tawao, October 1922 to March 1923. Crypt.

21371. Lenzites striata. Upon dry limbs in dry woods; plates dry and leathery, brown above, darker and velvety brown below on the laminae. Tawao, October 1922 to March 1923. Crypt.

21380. Nummularia. Upon dry dead small limbs of dense forests; patches cinnamon brown but black underneath, brittle, tightly attached. Tawao, October 1922 to March 1923. Crypt.

21410. [No name.] On host number 21409. [No entry for this collection.] Tawao, October 1922 to March 1923. Crypt.

21436. Faseolus? Upon dry dead limbs in humid forests; plate dry and tough, spongy, blackish brown above, yellowish white beneath. Tawao, October 1922 to March 1923. Crypt.

21437. Stereum. Scattered upon dead branches in wet forests; stipes erect, spongy, very tightly attached; thin plate deeply funnel shaped, ater above, umbrinus below except the chalky white margin. Tawao, October 1922 to March 1923. Crypt.

21438. Polyporus caliginosus Berk. Upon a large peeled limb upon wet ground of very damp dense forests; plates bendable, running below and very tightly attached, blackish brown above, castaneus below. Tawao, October 1922 to March 1923. Crypt.

21459. Polyporus tabacinus. Upon rotten logs of wet earth in dense forests; plates thin, rather dry and brittle, light umber color on both sides. Tawao, October 1922 to March 1923. Crypt.

21468. Polystictus occidentalis. Along sides of small nearly decayed logs in forests; plates dry, flexible, greenish yellow above, cremeus below. Tawao, October 1922 to March 1923. Crypt.

21469. [No name.] On host number 21465. [No entry for this collection.] Tawao, October 1922 to March 1923. Crypt.

21498. [No name.] Upon dead nearly rotten sticks or limbs upon ground of the damp forests; cups fleshy but rigid enough to break, red to yellowish red. Tawao, October 1922 to March 1923. Crypt.

21499. Polyporus. Upon decayed limbs of humid forested ravines; plates flexible, dry, dull brown above, metallic brown or bluish brown beneath. Tawao, October 1922 to March 1923. Crypt.

21504. [No name.] On the trunk of host number 21501. [No entry for this collection.] Tawao, October 1922 to March 1923. Crypt.

21531. [No name.] On host number 21529. [No entry for this collection.] Tawao, October 1922 to March 1923. Crypt.

21532. Polyporus discipes? Upon half rotten logs in moist forests; plates rather rigid, dry, and deep brown on both sides. Tawao, October 1922 to March 1923. Crypt.

21533. Polystictus elongatus. Along sides of nearly rotten logs in damp forests; plates single and upon short stalks above, but below running and forming a mass of them, whitish beneath, above bluish gray. Tawao, October 1922 to March 1923. Crypt.

21545. [No name.] Upper side of leaves of host number 21538. [No entry for this collection.] Tawao, October 1922 to March 1923. Crypt.

21546. Polyporus. On wet clay along creek embankments of dense humid forests; plates with stipes erect and chalky white, rather soft but dry, slightly funnel-shaped at the top. Tawao, October 1922 to March 1923. Crypt.

21587. Polystictus luteus? Upon small decayed limbs in a deeply forest river flat; plates dry and tough, chalky white beneath, umbrinus above. Tawao, October 1922 to March 1923. Crypt.

21624. [No name.] Upon fruits of Eugenia number 21522. [No entry for this collection; cited as E. ochneocarpa sp. nov. by Merr. 1929.] Tawao, October 1922 to March 1923. Crypt.

21625. [No name.] On decayed limbs of wet ground in dense forests; plates funnel-shaped, dry, lighter brown beneath, margins chalky white. Tawao, October 1922 to March 1923. Crypt.

21641. [No name.] Scattered along a dead nearly rotten small limb; plates soft and half fleshy, duller yellow convex upper side. Tawao, October 1922 to March 1923.

21644. [No name.] Upon half rotten limbs in deep forests; stipe tough or spongy, the ascending plates smooth or coarsely wrinkled, chalky white throughout. Tawao, October 1922 to March 1923. Crypt.

[Later Elmer notes]: Leaf fungus with host unknown. Probably Tetracera sp. Insect destroyed.

21654. [No name.] On leaves of host number 21548. [No entry for this collection.] Tawao, October 1922 to March 1923. Crypt.

21655. [No name.] Solitary puff-balls in damp humus covered ground of dense forests along a creek, bowl soft, yellowish gray and with brown everescences, 2 inches thick. Tawao, October 1922 to March 1923. Crypt.

21690. Hexagona discopoda. Upon dry but nearly rotten small limbs in wet flat of forests; plates fumosus on both sides, thin, dry and very flexible. Tawao, October 1922 to March 1923. Crypt.

21691. Polystictus xanthopus. Upon wet hardwood timbers in forested flats; plates sunken at top of the short brownish tough stipe, very thin, dry, and flexible, smooth and somewhat shining reddish brown above except the whitish margins, beneath chalky white. Tawao, October 1922 to March 1923. Crypt.

21701. Agaricus. Erect upon humus covered ground of damp forests; stipes soft, single or in clusters, pale white; cap pale white at the top center, otherwise pale brown on both sides, thin and wet. Tawao, October 1922 to March 1923. Crypt.

21716. Agaricus. On lower or lateral sides of a rotten timber, in humid forests; stipes ascendingly curved, they as well as the "cap" bright yellow, fragile and succulent. Tawao, October 1922 to March 1923. Crypt.

21719. [No name.] Upon host number 21718. [No entry for this collection.] Tawao, October 1922 to March 1923. Crypt.

21728. Punus [?]. On side of half rotten logs lying across streams of clearings; plates rather soft and nearly black on both sides. Tawao, October 1922 to March 1923. Crypt.

21738. Trametes. On rotten limbs upon wet ground of forests; plates dry, bendable, of a lighter shade of brown beneath. Tawao, October 1922 to March 1923. Crypt.

21746. Septabasidium. Upon the bark of living forest tree along a ridge, in between the buttresses near the ground; patches large, the peripheral portion light yellow, while the older or middle portion is a blackish brown. Tawao, October 1922 to March 1923. Crypt.

21757. [No name.] Upon leaflets of host number 21756. [No entry for this collection.] Tawao, October 1922 to March 1923. Crypt.

21760. Polyporus. Upon rotten porous snags in wet forests near a river; the masses covering entire side, white except the greenish gray upper extended portion, rather dry and very flexible or fragile. Tawao, October 1922 to March 1923. Crypt.

21770. [No name.] On leaves of host number 21766. [No entry for this collection.] Tawao, October 1922 to March 1923. Crypt.

21778. Polystictus. On small dead dry branches in dense wet forests; plates dry, black above, reddish brown beneath. Tawao, October 1922 to March 1923. Crypt.

21787. Xylaria. Upon all sides of a nearly decayed limb lying upon wet ground of dense forests; stalks well scattered, black or grayish toward the top, rather dry and rigid. Tawao, October 1922 to March 1923. Crypt.

21788. [No name.] Upon rotten fruits of number 21783 [no entry for this collection]; stalks or masses erect, glaucous green but the spore bearing tips yellow. Tawao, October 1922 to March 1923. Crypt.

21796. [No name.] In forests under a small erect shrub and upon humus covered ground; the chunks somewhat scattered, greenish gray (probably on deer dung). Tawao, October 1922 to March 1923. Crypt.

21811. [No name.] On host number 21810. [No entry for this collection.] Tawao, October 1922 to March 1923. Crypt.

21812. [No name.] Upon host number 21803. [No entry for this collection.] Tawao, October 1922 to March 1923. Crypt.

21820. Polystictus murinus? On a half decayed limb in deep forests; plates dry, flexible, erect, fumosus above, chalky white below. Tawao, October 1922 to March 1923. Crypt.

21828. Polystictus murinus. Upon a nearly decayed log, in wet forests and lying in a half swamp; plates dry, quite flexible, creamy white beneath, fumosus above and conspicuously marked. Tawao, October 1922 to March 1923. Crypt.

21854. Polyporus. Colonies in humus covered ground of dense forests; stipes erect, flexible, the rugose cap reddish brown above and chalky white beneath. Tawao, October 1922 to March 1923. Crypt.

21855. Fomes cali[rest illegible]. On the lower side of nearly rotten medium sized logs in humid forests; plate rigid, thick toward the base, wider than long, nearly black above, dark umber beneath. Tawao, October 1922 to March 1923. Crypt.

21856. Hexagona discopoda. Upon dry dead limbs in forests; plates thin and very flexible, dry, running along the underside, testaceous but darker above than on the spore surface. Tawao, October 1922 to March 1923. Crypt.

21864. [No name.] Upon host number 21857. [No entry for this collection.] Tawao, October 1922 to March 1923. Crypt.

21891. Hygrophorus. On a rotten piece of timber lying upon wet ground in the forests; stipes and gills white, the upper surface of the rounded cap yellowish brown. Tawao, October 1922 to March 1923. Crypt.

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21925. Ficus lucbanense Elm. Small 4 inch thick erect tree in very humid woods; branches laxly rebranched, the bark smooth and more or less mottled; leaves much paler beneath, tips much recurved; figs ascending, the tip much greener, dotted with yellowish white spots; seeds dark brown. Mt. Pinatubo, April to June, 1927. Morac.

21926. Elatostema viridescens Elm. Dense masses upon wet ledges in dense moist woods; stems succulent, ascending, declining from the base; leaves horizontal, darker above; the green inflorescence ascending. Mt. Pinatubo, April to June, 1927. Urtic.

21927. Dryopteris rhodolepis (Clk.) C. Chr. Terrestrial, in damp earth of cool moist woods; stipes few, erect or ascending from the ground; root-stock 2 by 6 inches in size; the frond nearly as long, much reclining, soft in texture; a pretty fern denizen. Mt. Pinatubo, April to June, 1927. Polypod.

21928. Macaranga loheri Elm. Erect, foot thick tree along gravelly stream beds in woods; bark smooth, mottled, the white bark soft; twigs green; leaves curvingly folded on the shining green side; flowering stalks reddish, the flowers yellowish. Mt. Pinatubo, April to June, 1927. Euphorb.

21929. Mischocarpus brachyphyllus Rdlk. [Same for 21929a.] Tree with a foot thick stem, in woods along creek beds; wood tough, the mottled bark smooth; branchlets crooked, erect; leaves horizontal, paler beneath; inflorescence erect, greenish except the pale yellow flowers. Mt. Pinatubo, April to June, 1927. Sapind.

21930. Melastoma candidum Don. Lax shrubs from 1 to 15 feet high, in shrubberies; wood soft, the yellowish gray bark smooth; branches lax, the young tips yellowish brown; petals pink; leaves mostly horizontal, paler beneath. Mt. Pinatubo, April to June, 1927. Melastom.

21931. [No name.] Upon host number 21930: Melastoma candidum. Mt. Pinatubo, April to June, 1927. Fungi.

21932. Saurauia polysperma (Blco.). Erect or spreading shrub-like tree along damp stony stream beds; wood soft, whitish, the smooth bark brown; twigs easily breaking; leaves ascending, much paler beneath; flowers white, pendant, in small clusters along the branchlets. Mt. Pinatubo, April to June, 1927. Dillen.

21933. Leucosyke capitellata (Poir.). Shrubs along shady stream beds; wood not hard, white; bark smooth, mottled; branches lax; leaves horizontally spreading, whitish beneath; male flowers greenish except the whitish male organs dehiscing with a charge of smoke or pollen grains! Mt. Pinatubo, April to June, 1927. Urtic.

21934. [No name.] On host number 21933: Leucosyke capitellata. Mt. Pinatubo, April to June, 1927. Fungi.

21935. Breynia cernua (Poir.). Lax shrub along shady stream beds; bark smooth, brown, the wood soft; leaves horizontal, paler beneath; young fruit pendant and very pale green. Mt. Pinatubo, April to June, 1927. Euphorb.

21936. Sambucus javanica Blm. Several stemmed shrub in loose gravelly soil of jungles; young stems green, gray and checked when old; branches spreading, the leaves similarly disposed; flowers yellow and white; berries salmon red. Mt. Pinatubo, April to June, 1927. Caprif.

21937. Dennstaedtia smithii Moore. Few stemmed terrestrial clusters, in very humid shady depressions; stipes a yard or two long, green, soft and pubescent, the frond portion nearly as long and much or widely spreading. Mt. Pinatubo, April to June, 1927. Polypod.

21938. Medinilla myriantha Merr. Shrubs upon humid boulders; wood reddish, rather hard, the gray to brown bark shredding; leaves much paler beneath; inflorescence mostly terminal, sometimes lateral, pink; the infrutescence deeper red. Mt. Pinatubo, April to June, 1927. Melast.

[Attached note] 21938a for 12 numbers.

21939. [No name.] Lichens with pale green upper and grayish white lower sides, along the upper side of shrubs in damp creek beds; cups brown. Mt. Pinatubo, April to June, 1927. Crypt.

21940. Mussaenda chlorantha Merr. Erect shrub, 6 inches thick, in damp jungles along stream beds; wood soft, white, the smooth bark dull brown; leaves much paler beneath, spreading; inflorescence erect, green, except the corolla segments which are yellow and the white bracts. Mt. Pinatubo, April to June, 1927. Rub.

21941. Maesa laxa Mez. Shrub along creek bottom jungles; wood white and soft, the bark dull brown and lenticelled; leaves much paler beneath; the infrutescence russet brown. Mt. Pinatubo, April to June, 1927. Myrsin.

21942. Begonia. Several stemmed herbs in wet ground along stream beds of jungles; stems 1 to 1-1/2 inches thick, greenish, the few twigs divaricate; leaves horizontal or descending, flat, much paler beneath; flowers white to pink, the stalks greenish. Mt. Pinatubo, April to June, 1927. Begon.

21943. Elaeocarpus zambalensis Elm. n. sp. Tree 1 foot thick in moist wooded depressions; wood rather soft, white, the smooth bark blotched; twigs numerous, erect; leaves ascending, dull green above; spikes erect, yellowish the pendant flowers whitish. Mt. Pinatubo, April to June, 1927. Elaeocarp.

21944. Ficus guyeri Elm. Shrubs in jungles; wood white and soft, the bark smooth and gray to brown blotches, without latex; leaves with recurved tips, paler beneath; the subpendant figs green but brownish red on the exposed sides. Mt. Pinatubo, April to June, 1927. Morac.

21945. Cypholophus moluccanus (Blm.). Lax shrub in wet stones along water courses; wood pithy, the bark brown; twigs ascending, the leaves much paler beneath; flower clusters greenish. Mt. Pinatubo, April to June, 1927. Urtic.

21946. Cryptocaria [Cryptocarya]. A 10 inch thick tree in rocky jungled woods; bark dark brown, longitudinally checked; leaves lucid and darker green above; tips [illegible] recurved; infrutescence [illegible]; young fruits shining, dark green. Mt. Pinatubo, April to June, 1927. Laur.

21948. [No name.] On host number 21929: Mischocarpus brachyphyllus. Mt. Pinatubo, April to June, 1927. Crypt.

21949. Viburnum floribundum Merr. Shrubs in shrubby edges of deep cuts; wood white, soft; bark smooth, brown and gray; leaves descending, tips recurved, paler beneath; seed stalks reddish, the young flattened fruits pale green. Mt. Pinatubo, April to June, 1927. Eric.

21950. Vaccinium benguetense Vid. Erect shrub-like trees, with crooked stems on edge of canyon among shrubs; wood hard, reddish toward the center, the old gray bark scaling in plates; leaves rigid, conduplicate upon the upper darker green, very lucid side; inflorescence green, the corolla pale white; fruit globose, 1/3 inch across, shining, nearly black. Mt. Pinatubo, April to June, 1927. Eric.

21951. Vaccinium igorotorum H.F. Copel. Burly small trees along wooded edges of deep ravines; wood hard, reddish toward the center; bark brown and gray checked, becoming shredded; twigs erect, lucid and darker green above; inflorescence green except the pale red corollas. Mt. Pinatubo, April to June, 1927. Eric.

21952. Macaranga cumingii (Muell.). Erect shrub-like tree in wooded edges of ravines; wood soft, white; the smooth bark grayish; twigs dark green; the leaves paler beneath; infrutescence reddish tinged, glutinous, ascending. Mt. Pinatubo, April to June, 1927. Euphorb.

21953. Evodia camiguinensis Merr. Crooked shrub-like tree in dry stony ground of woods; wood white, very soft; leaves more or less twisted and shallowly folded, slightly paler beneath; infrutescent stalks yellowish green, the copious young fruits dark green. Mt. Pinatubo, April to June, 1927. Celastr. [Rutac.]

21955. Tabernaemontana caudata Merr. Laxly branched shrubs, 2 yards high, in stony soil of dense shrubberies; wood soft, yellowish white; old bark yellowish gray, longitudinally checked, with an abundance of latex; leaves flat but recurved, paler beneath; flowers descending, the corolla tube light green, the segment white; fruits hanging, yellowish to dull red. Mt. Pinatubo, April to June, 1927. Apocyn.

21956. Ilex brunnea Merr. Six inches thick tree in dense woods; wood yellowish white, soft; the yellowish gray bark with excrescences; leaf tips recurved, otherwise flat, paler beneath; infrutescence pale green, shining and wine red when fully mature. Mt. Pinatubo, April to June, 1927. Aquifol.

21957. [No name.] On host number 21956 [Ilex brunnea]. Mt. Pinatubo, April to June, 1927. Crypt.

21959. Pittosporum odoratum Merr. Slender shrubs in jungled cuts; wood soft and white; the grayish white bark smooth; leaves strongly recurved toward the tips, much lighter green beneath; infrutescence erect, green. Mt. Pinatubo, April to June, 1927. Pittospor.

21960. Eugenia sablanensis Elm. Gnarly erect tree in densely wooded gulches; wood tough, reddish brown toward the center; bark gray, scaling in plates when old; branches ascending, rigid; the leaves similarly displayed, shining except the lower much lighter surface; infrutescence erect, wine red, the flowers dingy white. Mt. Pinatubo, April to June, 1927. Myrtac.

21961. [No name.] On host number 21960: Eugenia sablanensis. Mt. Pinatubo, April to June, 1927. Crypt.

21962. Cyclophorus (near lingua). Forming dense mats upon moss covered boulders in shrubberies; rhizomes branched and ramifying; the stiff stipes erect, the fronds rigid, erect, chalky white beneath; the sporophylles usually narrower. Mt. Pinatubo, April to June, 1927. Polypod.

21963. Ligustrum glabrinerve Elm. n. sp. Burly tree or coarse shrubs in dense jungles; wood moderately hard, reddish tinged toward the center; bark gray, scaling in thin plates; branchlets numerous, erect; leaves much paler green beneath; spikes erect, grayish green, except the whitish flowers. Mt. Pinatubo, April to June, 1927. Oleac.

21964. [No name.] On host number 21959: Pittosporum odoratum. Mt. Pinatubo, April to June, 1927. Crypt.

21965. Semecarpus thyrsoidea Elm. n. sp. A 1 foot tree in a wooded depression; wood soft, whitish; bark gray, mottled, smooth; twigs ascending; leaves curvingly folded upon the upper sublucid side, glaucous beneath; infrutescence erect, green and the nut portion more or less shining. Mt. Pinatubo, April to June, 1927. Anacard.

21966. Gelonium pinatubense Elm. n. sp. Male and fruits. A 2 to 3 yards high undershrub in wooded depressions; wood dingy white, moderately hard; branches spreading, rigid; leaves slightly paler beneath; flowers solitary or in small clusters in the leaf axils, yellowish green, ascending; fruits light purple, ascending, 1 inch long, obscurely trigomous, the calyx green. (See 22032 [Gelonium pinatubense].) Mt. Pinatubo, April to June, 1927. Euphorb.

21967. Lasianthus morus Elm. Slender and rigid undershrubs in dry woods of depressions; wood rather tough or hard, the smooth bark brownish; branches divaricate, toward the top, unbranched; leaves a trifle darker green above; buds whitish, the flower pure white; fruit finally turning blue. Mt. Pinatubo, April to June, 1927. Rubiac.

21968. Casearia crenata Merr. Tree-like shrubs in a dry wooded ridge; wood moderately hard, dingy white, the smooth bark yellowish brown; branches few toward the top, the branchlets numerous and glaucous green; flowers ascending, greenish; fruits also ascending, dark green but turning luteus, 1 inch long, obscurely triganous, dehiscing from apex down, the fleshy seeds membranes wine red, "ruber." Mt. Pinatubo, April to June, 1927. Flacourt.

21969. Acalypha angatensis Blco. Several stemmed shrubs among large stones in a creek bottom; wood pithy, bark brown and lenticelled; leaves paler beneath, the tips twisted; female spike erect, terminal green; male pendant, slender, axillary, dangly, white. Mt. Pinatubo, April to June, 1927. Euphorb.

21971. Decaspermum fruticosum Forst. Burly shrubs among shrubberies on boulders; wood moderately hard, dirty white, the brown bark scaling in thin plates; branches crooked; leaves lucid upon the upper curved side, much paler beneath; petals white, filaments pink to purple, anthers pale yellow. Mt. Pinatubo, April to June, 1927. Myrtac.

21972. Englehardtia [Engelhardtia] zambalensis Elm. n. sp. Small trees in densely wooded deep ravines; wood not hard, white; bark brown, more or less checked; leaves much lighter green beneath, nearly flat, sublucid above; pendant spikes very light or yellowish green, soft in texture. Mt. Pinatubo, April to June, 1927. Jugland.

21973. Elaeagnus philippensis Parr. Rambling over dense jungles along a stream bed; stem tough, with smooth brown bark, numerously rebranched; leaves shallowly folded, much greener agove; flowers pale yellowish brown, the pendant fruits greenish. Mt. Pinatubo, April to June, 1927. Elaeagnac.

21974. Viburnum luzonicum apoense Elm. Several stemmed shrubs in deep ravine; wood dingy white, the smooth bark brownish; leaves slightly greener above, tips recurved; inflorescence erect, the flowers pale white. Mt. Pinatubo, April to June, 1927. Caprif.

21975. Buddleia asiatica Lour. Shrubs in or along stony river beds; soft stems covered with brown shredded bark; leaves descendingly recurved; spikes grayish, subpendant. Mt. Pinatubo, April to June, 1927. Logan.

21976. Boehmeria multiflora C.B. Rob. Low shrub in stony river beds; stems with brown bark; leaves descending, lighter green beneath; spikes erect or nearly so, reddish brown. Mt. Pinatubo, April to June, 1927. Urtic.

21977. Pipturus arborescens (Link.). Shrubs in stony river bottoms; wood soft; the tough bark brown and lenticelled; leaves descending, much lighter green beneath; the inflorescence pale or yellowish green. Mt. Pinatubo, April to June, 1927. Urtic.

21978. Mussaenda microphylla Elm. n. sp. Among shrubs in hot or dry river embankments; wood rather tough, dingy white, the brown bark smooth; leaves paler beneath, curvingly folded upon the upper side; inflorescence greenish except the yellow corolla segments and white horizontally spreading bracts. Mt. Pinatubo, April to June, 1927. Rub.

21979. [No name.] Erect, densely covering stones in the river bed, rather dry and brittle, grayish and with blackish black spore disks. Mt. Pinatubo, April to June, 1927. Crypt.

21980. Ficus merrillii Elm. A crookedly stemmed tree with an 8 inch thick stem; the wood sappy white, the bark grayish white and smooth; in densely forested gulches; tubercles toward the stem ground, 1 to 2 yards long, hanging, laxly rebranched; the figs dark green, with brown lenticels, over 1/2 inch thick; latex present. Mt. Pinatubo, April to June, 1927. Morac.

21981. [No name.] On host number 21980: Ficus merrillii. Mt. Pinatubo, April to June, 1927. Crypt.

21982. Carionia elegans Naud. Erect shrubs in alpine shrubberies and along the river; wood reddish tinged toward the center, quite hard; brown bark coarsely lenticelled; leaves ascending, pale yellowish green beneath, velvety dark green upon the upper conduplicate side, tips recurved; the erect inflorescence reddish brown tinged, the showy petals pink or rose red. Mt. Pinatubo, April to June, 1927. Melast.

21983. Saurauia elegans (Choisy). Small tree in densely wooded ravines; wood soft, white, the gray bark more or less checked; leaves descendingly recurved, subsulphureous beneath; inflorescence reddish brown except the white corollas. Mt. Pinatubo, April to June, 1927. Dillen.

21984. Ficus integrifolia Elm. Burly tree in or near the river bed; leaves descending or the younger ones ascending, much lighter green beneath; bark gray, smooth; figs in clusters from stem and branches; pendant, flattish blobose, 1 to 1-1/2 inch across, tinged with a reddish brown. Mt. Pinatubo, April to June, 1927. Morac.

21986. Bridelia glauca Blm. Shrub-like tree in woods along the river bed; wood whitish soft; bark lenticelled; leaves sublucid above, subglaucous beneath, horizontal or descending; flowers yellowish green. Mt. Pinatubo, April to June, 1927. Euphorb.

21987. Lactuca dentata (Thunb.). Perennial herbs in sandy soil along the river flat -- here and there; leaves spreading, the flowers yellow. Mt. Pinatubo, April to June, 1927. Comp.

21988. Coelogyne bilamellata Lindb. Erect tufts upon ground covered stones in very damp wooded flats near the river; pseudobulbs green, the leaves recurved and slightly paler beneath; inflorescence terminal, the flat stalk green and arising from the base of this bulb; the outer floral organs pale yellow, the tips white and chocolate colored spots or striae. Mt. Pinatubo, April to June, 1927. Orch.

21989. Hypericum lackeyi Elm. n. sp. Lax undershrub in stony ground of wooded flats near the river; stems covered with brown bark; leaves flat, glaucous green beneath; flowers erect, luteus; the young fruits reddish, erect. Mt. Pinatubo, April to June, 1927. Guttif.

21990. Nepenthes alata Blco. Rambling over stones along the creek bottom or climbing in shrubberies, forming tangled masses; leaves rigid, their tips recurved and usually with a hanging pitcher; spikes erect, pale green except the greenish male flowers whose stamens are yellow and style column dull red. Mt. Pinatubo, April to June, 1927. Nepenth.

21991. Davallia solida (Forst.) Sm. Scattering over stones in shrubberies along the river bed; rhizome rigid, occasionally branched, tightly attached; stipes green, rigid, erect; fronds erect or nearly so, the segmented tips recurved, tough, very little paler beneath. Mt. Pinatubo, April to June, 1927. Davall.

21992. [No name.] On host number 21990: Nepenthes alata. Mt. Pinatubo, April to June, 1927. Crypt.

21993. [No name.] On host number 21984: Ficus integrifolia. Mt. Pinatubo, April to June, 1927. Crypt.

21994. Coleus igolotorum Briq. Subsucculent herbs in wet sandy soil along the river, forming dense masses; stems rebranched, green, spotted with reddish brown; leaf tips recurved, somewhat paler beneath; spikes erect, green except the blue flowers which soon fall. Mt. Pinatubo, April to June, 1927. Labiat.

21996. Lindenbergia philippinensis (Cham.). Annual or biennial herbs in sand gravelly soil along the river flat; stems quite rigid, green to brown, up to a yard in heigth; branches many, the soft leaves paler beneath; spikes green except the yellow corollas. Mt. Pinatubo, April to June, 1927. Scroph.?

21997. Vaccinium barandanum Vid. Erect shrub on stone gravelly ground of the river flat; wood rather hard, whitish; bark smooth and brownish; leaves curvingly recurved, nearly flat, yellowish green beneath; infrutescence erect, pale green but turning wine red, shining. Mt. Pinatubo, April to June, 1927. Eric.

21998. Begonia. [No description. Note:] Some plants distinctly mottled, others not. The same species apparently tufted and stoloniferous. Mt. Pinatubo, April to June, 1927. Begoniac.

21999. Ficus fastigiata Elm. Rigid erect shrubs in rocky shrub covered ledtes along river; wood tough, white, the smooth bark brown; branchlets numerous; erect; leaves shining above, much lighter beneath, tips recurved; figs reddish brown on the exposed sides; bark without latex. Mt. Pinatubo, April to June, 1927. Morac.

22000. Acoridium tenellum Nees & Mey. Dense clump on ledges along the upper river canyon; stems descending and recurved, with dense root masses, green; the subpendant [leaves] hard and shining green. Mt. Pinatubo, April to June, 1927. Orchid.

22001. Spathoglottis plicata Blm. Small clumps in gravelly soil along the river bed; stems erect, green, the tough leaves ascending but tips more or less recurved; flowers deep red, usually recurved. Mt. Pinatubo, April to June, 1927. Orchid.

22002. Conocephalus acuminatus Trec. A strangling woody climber in dense moist forest flats; stem few inches thick, repeatedly branched; the wood soft, the bark gray; leaves slightly paler beneath, the axillary bracts pale green and erect; inflorescence male, lilacinus in color. Mt. Pinatubo, April to June, 1927. Morac.

22003. Eugenia saligna (Miq.). A 1-1/2 foot thick tree in very wet, densely forested or wooded depression; wood rather hard, reddish brown toward the center; the grayish bark more or less checked; branchlets numerous, the conduplicate leaves much lighter beneath; infrutescent stalks green, the fruits deep lividus. Mt. Pinatubo, April to June, 1927. Myrt.

22004. Oreocnida trinervis (Wedd.). Crooked tree in wet ravines; wood soft and whitish, covered with smooth brown and gray blotched bark; leaves somewhat paler beneath, the petioles reddish tinged; infrutescence pale green. Mt. Pinatubo, April to June, 1927. Urtic.

22005. Rubus rosaefolia Sm. Several stemmed low shrubs in wet earth of wooded ravines; stems greenish, quite rigid; leaves paler beneath; flowers white, the berries red. Mt. Pinatubo, April to June, 1927. Rosac.

22006. Guioa perrottetii (Blm.). Erect tree 8 inches thick, in deep ravines; wood whitish, moderately hard, the bark mottled; leaves slightly paler beneath, usually recurved toward their tips; young infrutescence erect, pale green especially the young fruits. Mt. Pinatubo, April to June, 1927. Sapind.

22007. Carruthersia macgregorii Merr. Tree climber in wet deep ravines of dense woods; stem bendable, 2 inches thick, crooked, rebranched toward the top and forming tangled masses; wood porous, whitish; the thick bark yellowish brown, checked longitudinally, with an abundance of latex; leaves lucid above, much lighter beneath, tips recurved; inflorescent stalks green, the corolla white except the yellowish throat and reddish tinged basal portion. Mt. Pinatubo, April to June, 1927. Apocyn.

22008. Dryopteris luzonica Christ. Several stemmed terrestrial clumps in very wet humus covered ground or upon creek ledges in dense woods; roots form the short root stock, black, numerous; the greenish stipes soft, 1 to 3 feet long; their fronds much recurved and usually longer, the pinnae darker green above, drying green on both sides; rachis straw colored. Mt. Pinatubo, April to June, 1927. Fern.

22009. Selaginella. In wet ground of steep densely wooded cuts; stems often reddish brown, sometimes branched; segments much paler green beneath. Mt. Pinatubo, April to June, 1927. Selag.

22011. Discocalyx philippinensis Mez. Slender shrubs in woods of steep gulches; wood reddish white, hard, the smooth bark mottled; branches rigid, freely rebranched; leaves slightly paler beneath, recurved; inflorescence creamy white; "yonkam" in Negrito. Mt. Pinatubo, April to June, 1927. Myrsin.

22013. Pollia sorzogonensis (E. Mey.) Rank succulent masses over moist stones in densely wooded ravines; stems green, usually branched, reclining at the base but finally erect; leaves recurved, equally green on both sides; spikes erect, greenish except the watery white or bluish tinged flowers. Mt. Pinatubo, April to June, 1927. Commelin.

22014. Gironniera glabra Merr. A 2 feet thick tree in moist ravines; wood in the branches soft, white or nearly so; leaves conduplicate, tips much recurved, sublucid and slightly darker green above; infrutescence green, the obscurely compressed drupes turning wine red and juicy. Mt. Pinatubo, April to June, 1927. Ulm.

Note: Gironniera glabra Merr. is from Mt. Marivcles. My Aphananthe negrosensis is apparently the same but with nearly twice as long leaves. My number 22014 was distributed as Exocearia [Excoecaria?] baccifera Elm. n. sp., but upon closer examination it seems to be identical with Merrill's Gironniera glabra, whose leaves average only one-half as wide.

22015. Cyclophorus adnascens (Sw.) Desv. Climbing and forming dense masses along limbs in a damp wooded ravine; rhizomes flexible and rebranched; the fronds thick or rigid, descending, the midvein usually brown beneath. Note: Apparently this same species in a dwarfed form inhabits the lowlands in airy places along water courses; occasionally it is observed in Manila. Mt. Pinatubo, April to June, 1927. Polypod.

22016. Pipturus subalpinus Elm. n. sp. A climbing and rambling shrub in very wet wooded ravines, the tangled branches freely rebranched and with smooth brown bark; leaves slightly paler beneath, sublucid above; inflorescence green, the flowers more yellowish than green. Mt. Pinatubo, April to June, 1927. Urtic.

22017. Deeringia polysperma (Roxb.). Low undershrubs in moist jungles; stems green or reddish tinged along the upper side; leaves paler beneath, their base petiole portion purple; spikes green, ascending, the flowers whitish; the juicy berry snowberry-like. Mt. Pinatubo, April to June, 1927. Amaranth.

22018. Ficus integrifolia Elm. A large fig tree in wet wooded gulches; stem 2 to 3 feet thick, wadded toward the ground, otherwise crooked; leaves much lighter beneath, the petioles and veins yellowish green and shallowly folded; green figs upon short tubercles from main branches. Mt. Pinatubo, April to June, 1927. Morac.

22019. Maesa denticulata Mez. Low shrubs in gravelly sand covered soil of ravines; branchlets widely spreading, the leaves a trifle greener above; the young fruits or berries shining green. Mt. Pinatubo, April to June, 1927. Myrsin.

22020. Ficus merrittii Merr. A foot and a half thick tree in very damp ravine bottom near cliffs; wood soft, watery white, the smooth mottled bark with latex; branches spreading, the branchlets ascending; leaves dry, much lighter green beneath, only the tips recurved, the vein more yellowish green; tubercles descending from the stem toward the ground, bendable, 1-1/2 foot long, numerously rebranched and forming bunches; figs red with whitish or yellowish spots, their ascending stalks yellowish, 1 inch thick. Mt. Pinatubo, April to June, 1927. Morac.

22021. Tarenna incerta K. & V. Small tree in sand gravelly ground among woods; wood white rather soft, the mottled bark smooth; leaves paler beneath, coriaceous, very shining above; inflorescence ascending, green except the rather dark yellow corollas. Mt. Pinatubo, April to June, 1927. Rubiac.

22023. Cibotium cumingii Kze. On densely shaded bluffs near creek beds; fronds few from the short, rather thick root-stock, 15 feet long more or less, much recurved, the basal 1/3 stipitate and which is densely covered with soft golden yellow wool or hairs toward the ground; the hard rachis yellowish green above, brown beneath; segments also recurved, glaucous green beneath. Mt. Pinatubo, April to June, 1927. Polypod.

22024. Sauropus robinsonii Merr. Slender erect shrub on stony ledges of very damp woods; stem or rather its wood quite hard, the nearly smooth bark yellowish brown, the divaricate branchlets green; leaves paler beneath, flat but with recurved tips; flowers female, deep wine red; the fruiting stalk deeper red than the shining red capsule which is pendant and 1/2 inch across or more; very showy. Mt. Pinatubo, April to June, 1927. Euphorb.

22025. Asplenium laserpitiifolium Lam. Small clumps in shallow humus covered wet earth of densely wooded bluffs; fronds pale green especially beneath, ascending from the base, the frond portion much recurved. Mt. Pinatubo, April to June, 1927. Polypod.

22026. Asplenium truncatilobum (Pr.) Fec. Small terrestrial clumps in wet shallow humus covered soil upon bluffs or deeply shaded places; fronds declining over the surface, often somewhat curved, the upper surface shining and much darker green and of a metallic tint; stipes soft or nearly so, blackish brown, covered with a similarly colored pubescence. Mt. Pinatubo, April to June, 1927. Polypod.

22028. Jasminum populifolium Blm. A rambling shrub among thickets in or along cuts; stem hard and very rigid, repeatedly branched, covered with yellowish bark; leaves much recurved, lighter beneath and some of the old ones nearly glabrous; inflorescence erect, green except the white corollas, the young fruits very dark green and shining. Mt. Pinatubo, April to June, 1927. Oleac.

22029. Ficus merrillii Elm. A 6 inches thick tree in a deeply shaded ravine; wood soft, dingy white; its branches widely spreading; the gray bark smooth and more or less mottled; latex in bark absent; tubercles divaricate, a yard or more in length, from the stem, distantly branched all along, flexible; figs 1/2 inch thick or even 3/4 inch, pale green except the dark green apex, with brown lenticels. Mt. Pinatubo, April to June, 1927. Morac.

22030. Artocarpus rubrovenia Warb. A [smooth? foot?] thick erect tree in wooded ravines; the not hard wood yellowish white, the mottled bark with latex; leaves lucid on both sides but much paler beneath and deeply folded; inflorescence creamy yellow. Mt. Pinatubo, April to June, 1927. Morac.

22032. Gelonium pinatubense Elm. n. sp. An erect shrub-like tree in very rocky wooded slopes; wood quite rigid, yellowish white, the yellowish bark checked longitudinally; branches rigid, divaricate, rebranched; leaves much paler beneath, tips recurved, sublucid especially above; flowers erect, greenish; the erect fruit also erect, bright red, 1/2 inch long. Mt. Pinatubo, April to June, 1927. Euphorb.

22033. Polypodium heterocarpum Blm. Small clumps upon shallow humus covered earth of shaded bluffs; stipes pale green, stiffened by the slenderly decurrent leaf blades, ascending; the fronds much recurved and paler green beneath. Mt. Pinatubo, April to June, 1927. Polypod.

22034. Eugenia saligna (Miq.). Small trees in a wooded flat at the outlet of a deep cut; wood white or nearly so, soft in the branches which are numerously rebranched; leaves lighter green beneath, shallowly folded upon the upper sublucid side; twigs green, the infrutescence erect, the fruits nearly coal black, up to 3/4 inch across, deep purple and juicy under the soft skin. Mt. Pinatubo, April to June, 1927. Myrt.

22035. Asplenium nidus Linn. "Bird's nest" fern upon cratalus[?] of small trees in a wooded flat of a stream bed; fronds ascending, sublucid, the old ones recurved and persistent in the dead state, the edges irregularly wavy, narrowed and inwardly curved toward the base, with a matrix of spongy rootlets in its axils; the rigid midrib nearly black and shining beneath. Mt. Pinatubo, April to June, 1927. Polypod.

Note: This species or a form of it is brought constantly in from the provinces to the city of Manila and in valley towns. It is quite a hardy ornamental blade-like fern. In British North Borneo I collected a similar species whose blades measured between 10 and 15 inches wide and 5 to 7 feet long.

22036. Nephrolepis biserrata (Sw.) Schott. Hanging from around the basal portion of a "Bird's nest" fern of wooded ravines; rhizome rigid, crooked, blackish brown, branched; the rigid stipe greenish; fronds from a few feet to 15 feet in length; pinnae equally green, shining on both sides. Mt. Pinatubo, April to June, 1927. Fern.

22037. Polypodium subauriculatum Blm. Forming hanging clumps about other epiphytes in humid wooded flats; fronds hanging, from 2 to 10 feet long, the segments a trifle paler on their inner faces; sori sunken beneath, papillate above; the stipe dark brown; rhizome rigid, glaucous, crooked, branched. Mt. Pinatubo, April to June, 1927. Polypod.

22038. Antrophyum. Hanging clumps from tree trunks in very wet flats of woods near stream beds; fronds much lighter beneath, above often with a metallic hue; the short rhizome not rigid, yellow inside, forming a mass of spongy roots; stipes short but often twisted. Mt. Pinatubo, April to June, 1927. Polypod.

22039. Ficus stipulosa Miq. A strangling fig tree in woods along a creek bed; main branches widely spreading; leaves conduplicate, lighter green beneath, the stipules dry and brown; figs ascending, nearly 1 inch thick, green, hard, in divaricate axillary pairs. Mt. Pinatubo, April to June, 1927. Morac.

22040. [No name.] On host number 22039: Ficus stipulosa. Mt. Pinatubo, April to June, 1927. Crypt.

22042. Epipogum roseum (Don). In wet humus covered stony ground of deeply shaded ravines; stem erect, succulent, whitish but soon turning brown when old; flowers descending also white. Mt. Pinatubo, April to June, 1927. Orchid.

22043. Ophiorrhiza zambalensis Elm. n. sp. Loose tufts in wet humus covered ground along shaded stream beds; stems easily breaking, the upper side of the leaves shining and much darker green; erect inflorescence greenish, the corolla whitish. Mt. Pinatubo, April to June, 1927. Rubiac.

22044. Dryopteris adenophora C. Chr. var.? Several stemmed terrestrial clusters upon wooded wet ledges near a stream bed; stems erect, the stipes yellowish green; fronds longer than the stipes, much recurved; the thin segments much lighter green beneath; root stalk 6 inches long, rather thick. Mt. Pinatubo, April to June, 1927. Polypod.

22045. Lasianthus zambalensis Elm. n. sp. Slender erect shrubs upon wooded ledges near stream beds; wood moderately hard, the bark smooth and yellowish gray; branches green, rigid, occasionally rebranched; leaves shining and darker green above; flowers erect, whitish; fruits wash-blue when mature. Mt. Pinatubo, April to June, 1927. Rubiac.

22046. Williamsia viridescens Elm. n. sp. Erect shrub upon damp wooded ledges; wood moderately hard, white, the smooth bark gray and brown mottled; branches lax; leaves sublucid on both sides, slightly paler beneath; calyx green, the erect buds and corollas creamy white. Mt. Pinatubo, April to June, 1927. Rubiac.

22047. Semecarpus cuneiformis Blco. Erect shrub in stony ground of woods above a stream bed; stem few branched, the yellowish white wood rather hard or tough, the bark smooth and yellowish gray; twigs rigid; leaves a trifle curved upon the lower glaucous green surface, the midvein and veins yellowish; infrutescence erect, paniculate, the thick green stalks rigid; fruits lucid, the fleshy base green to yellow and red, the ripe seed nearly black[?]. Mt. Pinatubo, April to June, 1927. Anacard.

22048. Eria ramosii Leav. Forming dense mats along the upper side of tree branches along a very moist gulch; stems erect, green and herbaceous; the leaves thick, also ascending, slightly paler beneath; flowers descending, very deep or dark purple especially on the inner sides. Mt. Pinatubo, April to June, 1927. Orchid.

22049. Asplenium pellucidium Lam. var. Dense clumps upon humus and vine covered stones of a deeply shaded creek bed; fronds erect, recurved towards the apex, darker green above; the rhizome short, rigid, suberect; the stipes and rachis earthy brown. Mt. Pinatubo, April to June, 1927. Polypod.

22051. Polypodium longissimum Blm. Spreading clumps upon large boulders in damp wooded ravines; rhizomes rigid, 1 inch thick, pale or yellowish green; stipe rigid, green, up to a yard in length; the frond portion 1-1/2 yards long, strongly recurved, equally green on both sides, the sori papillate and paler green on the upper side. Mt. Pinatubo, April to June, 1927. Polypod.

22052. Berchemia philippinensis Vid. A tree climber in or along densely wooded creek courses; stem many branched toward the top, very rigid, green, the tough wood yellowish; twigs often green and hanging; leaves much lighter green beneath or subglaceous; inflorescence pale green, the flowers whitish. Mt. Pinatubo, April to June, 1927. Rhamnac.

22053. Derris zambalensis Elm. n. sp. A tough climber in dense jungled woods; stem terete, 2 inches thick, with hard or tough white wood, the brown bark roughened with excrescences; branchlets forming tangled masses, the leaves a trifle paler beneath and tips recurved; the pendant pods yellowish green. Mt. Pinatubo, April to June, 1927. Legum.

22054. Centranthera hispida R. Br. [Description of orchid crossed out.] Mt. Pinatubo, April to June, 1927. Scroph.

22055. Euonymus cochinchinensis Pier. A 6 inch thick tree in woods near a bluff; wood rather hard, dingy white, the smooth bark mottled; leaves much paler beneath, sublucid above; inflorescence shining green, the petals yellowish green but turning wine red with age; fruits red. Mt. Pinatubo, April to June, 1927. Celastr.

22056. Jasminum bifarium Wall. A rambling shrub in jungles along dry creeks; branches green, tough; the leaf tips recurved, the blades much darker green above; inflorescence erect, green except those of corolla segments; berry shining, nearly black. Mt. Pinatubo, April to June, 1927. Oleac.

22057. Pinanga elmeri Becc. Few stemmed clumps in wet earth along jungled water courses; stems erect, 1-1/2 inch thick, greenish gray, conspicuously ringed; boot 1 to 1-1/2 foot long, green and covered more or less with a scurfy brown; fronds 2 feet long more or less, strongly recurved, petiole from 3 to 10 inches long; leaflets narrower toward the base [illegible] in "Pinanga shape" at the tip, much recurved, paler beneath; infrutescence recurved, from below the boot, paniculate, dull green except the red fruit. Mt. Pinatubo, April to June, 1927. Palm.

22058. Languas pinatubensis Elm. n. sp. Spreading clumps with few stems in damp ground of jungles along creek beds; stems ascending 2 to 3 yards long, 1/2 inch thick, green, the lower one third leafless, swollen at the base; rhizome short, yellowish white; leaflets paler beneath, tips twistingly recurved, descending, the lower ones widely scattering and much reduced; infrutescence few branched, 10 inches long, the suberect stalks green, the hard subglobose fruits 1/3 inch across and luteus and ruber red, the few fruit bearing branches ascendingly curved. Mt. Pinatubo, April to June, 1927. Zingib.

22059. Pithecolobium prainianum Merr. Sprawling shrubs in dense jungles of limestones; wood soft white, the brown bark covered with lenticels and excrescences; leaf segments descending, glaucous beneath, the midrib and rachis yellowish on the under sides; pod hanging, curved, yellowish to red. Mt. Pinatubo, April to June, 1927. Legum.

22061. Vittaria elongata Sw. Masses hanging from moss and vine covered inclining tree trunks extending over stream beds along densely wooded mountain slopes; rhizomes flexible, crooked, branched; the stipe portion quite rigid; the blades lighter beneath, pendent from the recurved stipes, the longer and broader forms ribbon-like and somewhat twisted, those of the short and narrow forms flat and recurved. Mt. Pinatubo, April to June, 1927. Polypod.

20062. [No name.] Upon dry twigs of a Vaccinium species along jungled fringes of grass patches; the loose bunches dry, gray and soft in texture. Mt. Pinatubo, April to June, 1927. Crypt.

22063. [No name.] A black fungus upon the upper side of a Weinmania? species along grassland bordering dense woods (the foliage of a second growth from an old stump). Mt. Pinatubo, April to June, 1927. Crypt.

22064. [No name.] Upon the younger blades of a grass species (originally burned) of a dry flat; spores mainly upon the under side, grayish black, and in small patches. Mt. Pinatubo, April to June, 1927. Crypt.

22065. Astronia zambalensis Elm. n. sp. Small tree on a steep wooded slope; wood soft, whitish, the bark gray to brown; twigs angled and brown, flexible; leaves ascending sublucid above, nearly flat; inflorescence short paniculate, erect, deep scurfy brown except the caducous dull yellow petals. Mt. Pinatubo, April to June, 1927. Melast.

22067. Cyathea (Alsophila). A 5 inches thick tree fern along deep densely wooded ravines or cuts; fronds horizontal, 2 yards long, the stipe at the base covered with dark brown scales; pinnae subglaucous beneath, extending in reduced forms clear to the base. Mt. Pinatubo, April to June, 1927. Fern.

22069. Quercus bennettii Miq. A foot thick tree in very wet woods; trunk crooked, widely branching; wood fairly hard, dingy white, the coarse bark mottled; branchlets many, not rigid; leaves usually conduplicate, paler green beneath; staminate spikes flexible. Mt. Pinatubo, April to June, 1927. Fagac.

22071. [No name.] On host number 22058: Languas pinatubensis. Mt. Pinatubo, April to June, 1927. Crypt.

22073. Marattia ternatea de Vr. A large succulent terrestrial clump on a steep very wet incline; trunk short but thick; fronds decompound, several, 10 feet long more or less; the yellowish green ascending stipes shorter than the frond portion and covered with yellowish brown scales, especially toward the ground where it is provided with a pair of thick stipular organs rigid but vegetable-like in texture; pinnae recurved, much darker green above. Mt. Pinatubo, April to June, 1927. Fern.

22074. Tectaria polymorpha (Wall.) Copel. Terrestrial clump upon deeply shaded ledges covered with humus; root stock erect, a half a foot long by 2 inches thick, blackish; fronds 1-1/2 yards high or long, 2 or 3 in a clump, ascending but the upper half or frond portion recurved; laminae thin, lighter green beneath. Mt. Pinatubo, April to June, 1927. Polypod.

22075. Dryopteris porphyricola Copel.? Coarse terrestrial tufts in wet gravelly soil of cool, densely wooded gulches; trunk 1-1/2 foot high by 6 inches thick; fronds numerous, erect, recurved, 1-1/2 yards long or longer; the basal one third stipitate but with green pinnate bracts; segments much recurved, lighter green beneath. Mt. Pinatubo, April to June, 1927. Polypod.

22076. Cyrtandra pinatubensis Elm. n. sp. Laxly branched shrubs in wet gravelly ground of wooded gulches; bark yellowish brown, the soft wood with a large pith; branches crooked; leaves horizontal, much lighter beneath; inflorescent bracts pale or yellowish green; corollas pure white, soon wasting into a rotten mass. Mt. Pinatubo, April to June, 1927. Gesner.

22077. Aglamorpha brooksii Copel. Epiphytic clumps nearly a yard across the base in humid gulches; fronds ascending, many, 1-1/2 yards long or longer, the basal segments gradually reduced, towards the apex confluent, very smooth and slippery even in the dry state; spores black towards the apex only. Mt. Pinatubo, April to June, 1927. Polypod.

22078. Williamsia viridescens Elm. n. sp. Little but slender trees of a wet cut in the woods; branches divaricate, the leaves much paler beneath; flowers watery white, erect. Mt. Pinatubo, April to June, 1927. Rubiac.

22079. Lasianthus bordenii Elm. Rigid erect tree-like shrub in humid woods; branches divaricate, occasionally rebranched; leaves much darker green above; flowers ascending, white, the berries apparently turning blue when ripe. Mt. Pinatubo, April to June, 1927. Rubiac.

22080. [No name.] On host number 22079: Lasianthus bordenii. Mt. Pinatubo, April to June, 1927. Crypt.

22081. [No name.] On host number 22078: Williamsia viridescens. Mt. Pinatubo, April to June, 1927. Crypt.

22082. Polypodium obliquatum Blm. Hanging from moss covered stems of shrubs in a very damp sheltered wooded ravine near a stream bed; fronds descendingly curved, darker green above; the stipes are rather rigid for their size, further up reinforced by the reduced basal pinnae; sori a trifle oblique. Mt. Pinatubo, April to June, 1927. Polypod.

22083. [No name.] Hanging from branches of very dark and shady cuts in dense jungles, pale or yellowish green. Mt. Pinatubo, April to June, 1927. Moss.

22084. Macaranga ramiflora Elm. A foot thick tree in a moist ravine; leaves ascending, much darker green beneath; the yellowish green fruits sticky; wood soft, whitish, the smooth bark grayish white; branches ascending but widely spreading. Mt. Pinatubo, April to June, 1927. Euphorb.

22085. [No name.] Dense masses around the base of stunted shrubs upon large boulders in grass lands; quite dry, black and gray. Mt. Pinatubo, April to June, 1927. Crypt.

22086. Tectaria leuzeana (Gaud.) Copel. Terrestrial in wet humid woods; trunk a foot thick and twice as long; fronds several, 5 yards long, spreading; stipes nearly one half the length of the frond, ascending, brown and covered with similarly colored scales especially toward the ground; segments much recurved, the basal ones longer, heavy and paler beneath, the apical ones sterile. Note: This same species was also collected by me on one of my exploration trips to British North Borneo. Mt. Pinatubo, April to June, 1927. Polypod.

22087. Chloranthus officinalis Blm. In wet stony ground at the bottom of a ledge among woods; stems 1 to 2 yards long, divaricately branched, the twigs green; fruit ascending, too young as to color; (surely white!). Mt. Pinatubo, April to June, 1927. Chloranth.

22088. Asplenium unilaterale Lam. Few stemmed clumps in loose talus bed at the bottom of a ledge among very dense humid woods; stipes and rachis shining black; rhizome flexible; fronds recurved, thin, equally dark green on both sides. Mt. Pinatubo, April to June, 1927. Polypod.

22089. [No name.] On host number 22084: Macaranga ramiflora. Mt. Pinatubo, April to June, 1927. Crypt.

22090. Ardisia proteifolia Mez. Low suberect undershrub in very wet deeply shaded woods; stems rigid, crooked, occasionally branched; leaves horizontal, also rigid, much darker green beneath; inflorescence red except the pale white petals and yellow anthers, the flowers pendant. Mt. Pinatubo, April to June, 1927. Myrsinac.

22092. Lecanopteris carnosa pumila Blm.? Epiphytic and cleaving about limbs of trees standing along the upper edges of deep wooded ravines; rhizome fleshy, glaucous green, honey-combed and inhabited by ants, roughened by the old conical stipe bases; fronds descending, of various sizes, the spare segments upwardly turned with their faces downhill. Mt. Pinatubo, April to June, 1927. Polypod.

22094. Dalbergia albiflora Elm. n. sp. A climbing and rambling shrub in dense jungles along cuts; stem tough, brown, excrescent; leaves descending, very shining above, much paler beneath; inflorescence erect or nearly so, the calyx very pale green, the corolla pure white. Mt. Pinatubo, April to June, 1927. Legum.

22096. Medinilla astronioides Tri. Erect shrub in humid woods near a bluff; stem few inches thick, widely branched above; the smooth bark yellowish brown, the greenish white soft wood; inflorescence erect, yellowish green except the light pink petals. Mt. Pinatubo, April to June, 1927. Melast.

22097. Pteris (quadriaurita Retz) glaucovirens Goldm. Small clumps in wet talus beds at the base of a densely wooded bluff; the rhizome hard and rigid; the stipes ascending; the fronds much recurved, varying from a few inches to a few feet in length. Mt. Pinatubo, April to June, 1927. Polypod.

22098. Asplenium spathulinum J. Sm. Several stemmed clusters in wet humus covered ground of jungles; stems several, ascending, quite rigid; the heavy fronds much recurved, tips often touching the ground where new plantlets are formed, paler green beneath; a beautiful fern. Mt. Pinatubo, April to June, 1927. Polypod.

22099. Cyathea contaminans Copel. A 6 inches thick tree fern along creek beds and in woods; stem with scars; fronds widely spreading, 10 feet long or longer, the thick petioles brown and spiny, its basal part covered by yellowish white scales; pinnae subglaucous green beneath, heavy, the final segments subpendant. Mt. Pinatubo, April to June, 1927. Fern.

22100. Symplocos ahernii Brand. A rather burly tree in woods along a dry creek; wood white and rather hard, the bark blotched; leaves shallowly folded, much lighter green beneath; infrutescence ascending, the drupes turning nearly black. Mt. Pinatubo, April to June, 1927. Symploc.

22102. Elatostema brunneolus[um] Elm. n.sp. Rank and succulent herbs in wet ground along a deeply shaded stream bed bank; stems at the base nearly 1 inch thick, watery green, reclining and occasionally branched, the leaf bearing portion ascending; blades much paler beneath; inflorescence erect, green, the flowers whitish; note: not E. banahaensis[e] Rob. - alliance with E. opiculosum Elm. Mt. Pinatubo, April to June, 1927. Urtic.

22103. Diplazium grammitoides Pr. Soft little tufts upon moss covered stones in stream beds of deeply shaded cuts; fronds descending upon the slope of the stones, pale green especially beneath. Mt. Pinatubo, April to June, 1927. Polypod.

22104. Chloranthus brachystachys Blm. Suberect shrub in wet soil of humid banks along dry creeks; branches freely rebranched toward the top; leaves recurved, slightly paler beneath; spikes erect, green except the yellowish white flowers; berries vermillion red, shining. Mt. Pinatubo, April to June, 1927. Chloranth.

22105. Smilax verruculosa Merr. A rambling shrub among dense thickets or jungles; leaves with strongly recurved tips, slightly paler beneath. Mt. Pinatubo, April to June, 1927. Liliac.

22106. [No name.] A soft moss or scale-moss along the upper wetter portion of tree trunks; in humid woods. Mt. Pinatubo, April to June, 1927. Crypt.

22107. Polypodium longicuspe C. Chr. n. sp. Descending tufts from moss covered tree trunks in humid woods; rhizome rigid, crooked and short rebranched, young tips clothed with dense soft hair-like scales; stipes and rachis shining black beneath; pinnae also rigid, somewhat paler beneath, the segments usually bordered by grayish white lime spots. Mt. Pinatubo, April to June, 1927. Polypod.

22108. Trichomanes pallidum Blm. With other mosses forming patches in the lower or sheltered portions of trees, logs or cliffs of very wet or humid places; fronds descending or subpendent, very thin or soft, ashy gray; the [massed?] rhizomes filiform. Mt. Pinatubo, April to June, 1927. Fern.

22109. [No name.] On host number 22100: Symplocos ahernii. Mt. Pinatubo, April to June, 1927. Crypt.

22111. Curculigo capitulata (Lour.). Rank tufts upon very humid ledges or in other very wet places of the jungles; stem 2 inches thick or thicker, a foot long or less; petioles erect, arranged in 3 ranks, the blade much recurved and convex beneath; flowers yellow, the head turned downwards, upon 10 inches long stalk which arises from the leaf axils. Mt. Pinatubo, April to June, 1927. Amaryll.

22112. Ficus benguetense Merr. Crooked tree in damp dense woods; the bark mottled; branches spreading; leaves likewise spreading but with recurved tips, paler beneath, the young ones much lighter green; figs green, ascending from the leaf axils, single or in pairs. Mt. Pinatubo, April to June, 1927. Morac.

22113. [No name.] A moss forming dense masses along small tree trunks of wet jungles near a stream bed. Mt. Pinatubo, April to June, 1927. Crypt.

22114. Procris laevigata Blm. Suffrutescent and epiphytic in damp woods; stem flexible, ascendingly curved, occasionally branched; the thick leaves ascending; male flowers upon slender stalks, pale white, the female in very dense axillary green clusters. Mt. Pinatubo, April to June, 1927. Urtic.

22115. Rubus moluccanus Linn. A rambling shrub in jungles; leaves mostly horizontal, yellowish beneath; flowers mainly toward the ends and often pendant or nearly so, the petals white. Mt. Pinatubo, April to June, 1927. Rosac.

22116. Christiopteris sagitta [sagittata] (Christ.). Copel. Clumps about the base of other large epiphytic fern clumps of humid woods; rhizome crooked, branched, quite rigid; stipes also rigid; the smooth, stiff blades of various sizes and shapes, with recurved tips, quite slippery and lucid on both sides. Mt. Pinatubo, April to June, 1927. Polypod.

22117. [No name.] On host number 22111: Curculigo capitulata. Mt. Pinatubo, April to June, 1927. Crypt.

22118. Saurauia polysperma (Blco.). An 8 inches thick tree or very coarse shrub in a much jungled flat; wood white, soft, the smooth bark brown; the descending leaves much paler beneath; the hanging flowers white except the green stalks, from the main branches. Mt. Pinatubo, April to June, 1927. Dillen.

22119. [No name.] On host number 22118: Saurauia polysperma. Mt. Pinatubo, April to June, 1927. Crypt.

22120. Asplenium unilaterale Lam. In small clusters or in aggrarious [gregarious?] masses upon very wet earth upon stones of a mud flat; rhizomes running, dull green; stipes erect; the fronds much recurved, or a very dark color above. Mt. Pinatubo, April to June, 1927. Polypod.

22121. Lycopodium merrillii Hert. Tuftlets hanging from moss covered limbs of dense humid woods; the numerous pendant branches limp; leaflets descending, shining; spore packets yellow. Mt. Pinatubo, April to June, 1927. Lycopod.

22123. Argostemma solaniflorum Elm. Upon wet moss covered stones or in wet earth, usually in clusters, the watery green stems reclining and rebranched; leaves paler beneath, soft, flat; flowers pointing downhill, the corolla white. Mt. Pinatubo, April to June, 1927. Rubiac.

22124. Monogramma paradoxa (Fée) Bedd. Dense velvety masses along sheltered sides of a tree fern or upon wet boulders in damp places or woods; frond very descending, soft in texture, very dark or dull green; only rarely met. Mt. Pinatubo, April to June, 1927. Polypod.

22125. Asplenium unilaterale Lam. Few stemmed clumps or tuftlets in wet talus beds of humid woods; rhizomes dull green, herbaceous, crooked and horizontal, rebranched; the erect stipes soft in texture, shining, brown to black in color, the rachis similar; fronds recurved, especially toward their tips, the thin flat lamina somewhat paler beneath and serrate along the upper edge. Mt. Pinatubo, April to June, 1927. Polypod.

22126. Pteris (quadriaurita Retz) glaucovirens. Rather coarse terrestrial clumps in wet earth of dense woods; rhizome few inches thick and several inches long; stipes erect or ascending, up to a yard in heigth. Mt. Pinatubo, April to June, 1927. Polypod.

22127. Polystichum sp. n.? Small clumps along shaded talus beds of a dry cliff; rhizome short, crooked, rebranched; fronds erect and tips recurved, pale green, the pinnae still lighter green beneath; stipes slender, not rigid; a much smaller and paler plant than any number 22149 of this same species. Mt. Pinatubo, April to June, 1927. Polypod.

22128. Diplazium williamsii Copl. Along the bottom portion of cliffs in humid woods; rhizome suberect, 1 inch thick, several inches long or high, very hard; fronds ascending and recurved, much lighter beneath. Mt. Pinatubo, April to June, 1927. Polypod.

22129. Selaginella. Upon mud flats, the stems recurved toward the ground. Mt. Pinatubo, April to June, 1927. Selaginell.

22130. Cyrtandra quisumbingii Elm. n. sp. A very laxly branched shrub upon dry but wooded bluffs; the soft stem covered with smooth yellowish bark; leaves flat, descending, much lighter beneath; inflorescence greenish, descending or pendant, the corolla white. Mt. Pinatubo, April to June, 1927. Gesner.

22132. Begonia. Scattered patches in moist humus covered ravines; stems reclining, pale green, occasionally rebranched; leaves descending, sublucid above, much paler beneath; flowers white to pink. Mt. Pinatubo, April to June, 1927. Begoniac.

22133. Begonia. Scattering in wet humus covered soil of dense jungles; stems pale green, occasionally branched, reclining toward the ground; leaves descending, lucid and darker green above; flowers white to pink. Mt. Pinatubo, April to June, 1927. Begoniac.

22135. Blechnum n. sp. Upon dry but deeply or densely wooded cliffs; root stalk a few inches thick, nearly a foot long, descending but the frond bearing portion ascendingly curved; fronds paler beneath, in a rosette, rather dry; the young erect ones pink colored, the older ones with a bluish green or metalic luster; fertile fronds not observed. Mt. Pinatubo, April to June, 1927. Polypod.

22136. Trichomanes bauerianum Endl. Clumps upon sides of a well shaded but dry airy side of a bluff at 6000 feet elevation; fronds descending toward their tips, soft, dry in texture; rhizome or rather root stock hard and rigid, several inches long by an inch thick; stipes stiff and more or less brittle. Mt. Pinatubo, April to June, 1927. Fern.

22137. Lindsaya decomposita Willd. Small clumps in loose ground at base of a wooded cliff; rhizome crooked, rebranched, short, not hard; fronds much recurved. Mt. Pinatubo, April to June, 1927. Polypod.

22138. Asplenium filipes Copl. Dense colonies in a wet place near the bottom of a wooded ledge; rhizomes thin, flexible, crooked and branched; stipes ascending, fine, brownish to black; fronds much recurved, paler beneath, curing green. Mt. Pinatubo, April to June, 1927. Polypod.

22139. [No name.] On the leaves of Pollia [sorzogonensis? 22013?] (see number of specimen). Mt. Pinatubo, April to June, 1927. Crypt.

22140. [No name.] Upon leaves of a fern Marattia [ternatea? 22073?] (see specimen number). Mt. Pinatubo, April to June, 1927. Crypt.

22141. Ficus caudatifolia Warb. An epiphytic shrub at the top of a large tree near a wooded ledge; branches smooth and gray; the leaves much lighter green beneath, their tips somewhat recurved; figs strawberry red, rough, 3/4 inch thick, the slender recurved stalks also red especially the syconium part. Mt. Pinatubo, April to June, 1927. Morac.

22142. [No name.] On host number 22141: Ficus caudatifolia. Mt. Pinatubo, April to June, 1927. Crypt.

22144. [No name.] On host number 22143: Freycinetia [no entry for this collection]. Mt. Pinatubo, April to June, 1927. Crypt.

22145. Garcinia vidalii Merr. A tree, 1-1/2 foot thick along a wooded ridge; branches divaricate toward the top, the twigs short and ascendingly curved; leaves thick and stiff, much lighter green [illegible] so beneath, the edges usually curved under; fruit young, 3 inches across, finally globose, dark green with a light yellow sticky sap. Mt. Pinatubo, April to June, 1927. Garciniac. [Clusiac.]

22146. [No name.] On host number 22145: Garcinia vidalii. Mt. Pinatubo, April to June, 1927. Crypt.

22147. [No name.] On foliage of apparently a young shrub of a Lauraceae species? Mt. Pinatubo, April to June, 1927. Crypt.

22148. Pteris longipinnula Wall.? Terrestrial clumps in damp humus covered woods; rhizome trunk-like, 1 to 2 inches thick, several inches long, reddish when cut; stipes reddish brown, erect, several, varying in length; segments of fronds recurved, slightly paler beneath. Note: This species was found growing under the same ecological conditions as Pteris glaucovirens Gold. and is very similar except for the basal pair of pinnae being simple, not forked. Mt. Pinatubo, April to June, 1927. Polypod.

22149. Polystichum aristatum (Furst.) sp. nov.?? Small terrestrial clumps in damp woods of humus covered ground; stipes erect, green; fronds recurved, the segments quite rigid, flat, paler beneath; stipes not hard, more brown than green. Mt. Pinatubo, April to June, 1927. Polypod.

22150. Dryopteris loheriana (Christ) C. Chr. Rank clumps in very wet ground of wooded depressions; root stock a few inches thick, a half foot or longer; stipes up to a yard long, dull green to brown near the ground; fronds as long, strongly recurved, the segments rather dry, flat, much paler beneath. Mt. Pinatubo, April to June, 1927. Polypod.

22152. Humata ophioglossa Cav. Running along moss covered inclining tree trunk in a humid flat; rhizome very flexible, subglaucous green, brown bristle covered, slender, rebranched; blades sublucid, smooth, flat, slightly paler beneath; the fertile usually toward the young tips of the slender rhizomes, rather scarce. Mt. Pinatubo, April to June, 1927. Polypod.

22153. Polypodium accedens Blm. Running along the under or wettest side of moss covered small stems not far distant above the ground of very humid wooded cuts; blades descending, slightly paler beneath; rhizome very flexible, branched, slender, with dirty brown humus-gathering roots, filiform; stipes short yet slender. Note: This Polypodium species I have collected on all of my exploration trips in the Philippines and is very abundant in damp shaded places of middle elevations. Mt. Pinatubo, April to June, 1927. Polypod.

22155. Dryopteris urophylla (Wall.) C. Chr. Terrestrial clumps in damp ravines; root stock thick, short, crooked; stipes few, erect, a yard long, green except the brownish base; fronds as long, recurved toward the tips, paler beneath, quite thin and dry in texture; rachis yellowish brown; green on both sides in the dry state. Mt. Pinatubo, April to June, 1927. Polypod.

22156. Ficus peninsula Elm. An epiphytic shrub in a very damp steep ravine; branches gray and smooth; young twigs and petioles yellowish brown; leaves rigid, descending, flat but tips abruptly recurved, shining above, lighter beneath; figs recurved from the leaf axils, hard, green, short ellipsoid, apex raised. Mt. Pinatubo, April to June, 1927. Morac.

22157. Eugenia sablanensis Elm. Slender erect tree in dense woods of a damp ravine; bark smooth, grayish, blotched; branchlets erect or ascending from the top mostly; leaves also ascending, much lighter or yellowish green beneath, nearly flat; inflorescent stalks dark green, the calyx reddish brown. Mt. Pinatubo, April to June, 1927. Myrtac.

22158. [No name.] On host number 22157: Eugenia sablanensis. Mt. Pinatubo, April to June, 1927. Crypt.

22159. [No name.] On host number 22157: Eugenia sablanensis. Mt. Pinatubo, April to June, 1927. Crypt.

22160. Selaginella. Scattering along a densely shaded incline and upon the ridge among jungles; stems usually curved at the base, rigid, erect, reddish brown; fronds recurved, paler beneath. Mt. Pinatubo, April to June, 1927. Selaginellac.

22161. Ficus variegata Blm. A fully 3-1/2 foot thick tree in moist woods; bark yellowish gray; main branches widely spreading; leaves much darker green above, their petioles yellowish green, the midrib and veins light, more or less folded; figs apple green, slightly sunken at the apex, upon 1/2 to 3 inches long rigid tubercles from branches. Mt. Pinatubo, April to June, 1927. Morac.

22162. Dryopteris rhodolepis (Clk.) C. Chr. Terrestrial, in densely wooded ravines; root stock coarse, few inches thick, 8 inches or more in length; stipes ascending, yellowish brown hairy at the base, up to a yard in length; fronds much recurved, as long, pale yellowish green; a pretty fern denizen. Mt. Pinatubo, April to June, 1927. Polypod.

22163. Polystichum aculeatum (Sw.) Coarse terrestrial clumps, in humid ravines; rhizome few inches thick, a half foot or more in length; stipes ascending, green, at the base beset with dirty brown scales, up to a yard long; the recurved frond nearly as long, lucid and much darker green above; a common species, half dwarfed in dry open places and assuming a rank form in wet shady situations. Mt. Pinatubo, April to June, 1927. Polypod.

22164. Diplazium (polypodioides Blm.) dolichosorum Copel. var. Terrestrial in a wet ravine; stipes from a stump a foot thick and longer, pale yellowish green, more or less spiny, 1 to 2 yards long, several, ascending; fronds as long, much recurved, paler beneath. Mt. Pinatubo, April to June, 1927. Polypod.

22165. Vittaria elongata Sw. Small clumps upon moss covered tree trunks in dense woods; fronds recurved, paler beneath, quite rigid. Mt. Pinatubo, April to June, 1927. Polypod.

22166. Microlepia strigosa Pr. In wet earth of humid ravines; rhizome short, with few stems or the blackish brown stipes suberect and about 2 feet long; frond portion somewhat recurved, as long, dark green but especially so on the upper flat side. Mt. Pinatubo, April to June, 1927. Polypod.

22167. Pteris tripartita Sw. (cf. Mineana Hook.). A rank terrestrial Pteris or "Brake fern," in very humid gulches; stems or stipes as thick as a man's wrist, green, erect, 2 yards long or longer, bearing at the top a scirpoidly [scorpiodly?] branched frond; pinnae much darker green above, limp and heavy. Note: This same species is occasionally found growing in the Manila gardens in a much reduced size. Mt. Pinatubo, April to June, 1927. Polypod.

22168. Lysimachia capillipes Hems. Biennial herbs in loose wet humus covered ground in dense woods of deep ravines; stems green, angular or rigid, the soft leaves velvety dark green above; the recurved flower luteus. Mt. Pinatubo, April to June, 1927. Primulac.

22169. Lindsaya merrillii Copel. Forming masses and running along wet moss covered root buttresses of trees in very wet or humid places; rhizomes branched, shining brown, easily broken; fronds gracefully recurved, pale green, the slender rachis shining and straw-colored. An elegant fern! Mt. Pinatubo, April to June, 1927. Polypod.

22171. [No name.] On host number 22170: Pinanga [no entry for this collection]. Mt. Pinatubo, April to June, 1927. Crypt.

22172. Coleus maeranthus Merr. Laxly branched undershrub in well shaded woods along the horse trail; stem and larger branches yellowish brown; excrescent; twigs green and ascending; leaves flat, horizontal; spikes erect, pale green except the pale blue flowers. Mt. Pinatubo, April to June, 1927. Lab.

22173. Ficus perfulva Elm. Epiphytic upon the upper or outer limbs of trees of steep wooded ravines; leaves rigid, tips recurved, much lighter green beneath, the young twig portion and the petioles deep yellowish brown; figs dull or subglaucous green. Mt. Pinatubo, April to June, 1927. Morac.

22174. Commelina luzonensis Elm. n. sp. Rambling among thickets of open places in ravines; stems long, green, soft, repeatedly branched; the flat leaves horizontal, paler beneath; flowers light blue, their sheath pale green. Mt. Pinatubo, April to June, 1927. Commelinac.

22175. Elatostema contiguum C.B. Rob. Patches in wet ground of a cut; stem running, rebranched, succulent, ascendingly curved; leaves ascending, flat, paler beneath. Mt. Pinatubo, April to June, 1927. Urtic.

22176. Mallotus ricinoides (Pers.). Small or slender trees in wooded depressions along the horse trail; wood soft, white, the smooth bark mottled; leaves yellowish gray beneath; the ascending fruits similarly colored. Mt. Pinatubo, April to June, 1927. Euphorb.

22177. Ficus minahassae Miq. Tree in woods along the horse trail; wood soft or pulpy, the smooth bark mottled; branches spreading; leaves flat, slightly paler beneath; fruits in solid heads along branched descending flexible streamers from the lower side or base of the stem. Mt. Pinatubo, April to June, 1927. Morac.

22178. Turpinia sambucifolia Elm. n. sp. A rather large tree in or among dense woods along the horse trail; stem 2 to 3 feet thick, crooked, the wood soft; leaves mostly horizontal, the leaf tips recurved; infrutescence ascending, the stalks pale green, the fruits themselves darker green. Mt. Pinatubo, April to June, 1927. Staphyleac.

22179. Aphanamyxis pinatubensis Elm. n. sp. Erect shrub, sparingly branched, the branchlets ascending; both crooked; leaves horizontal, 1-1/2 yards long, toward the top only, alternating; the leaflets toward the base much reduced; spike axillary, 1-1/2 yards long, the distal half with red fruits. Mt. Pinatubo, April to June, 1927. Meliac.

22180. Davallodes hirsutum Copl. Forming clusters on the nether side of tree trunks in humid depressions; rhizome crooked, short rebranched, not rigid, 1/2 inch thick, greenish except the trichomes; fronds descending, pale green especially beneath, soft. Mt. Pinatubo, April to June, 1927. Polypod.

22181. Lobelia nicotianaefolia v. mollis Elm. n. var. A rank herb in wet ground of a grass thicketed incline; stem pale green, 2 inches thick, 3 or more yards long, reclining especially toward the flower bearing branches which are long and curved; flowering tip erect, the flowers pale white. Mt. Pinatubo, April to June, 1927. Campanul.

22182. Eugenia llanosii Merr. A foot and a half thick tree in or upon wooded ridges; bark smooth, yellowish gray; twigs crowded, erect; leaves also ascending, flat, paler beneath; old flower cups pale green, upon short terminal stalks. Mt. Pinatubo, April to June, 1927. Myrtac.

22183. [No name.] On host number 22182: Eugenia llanosii. Mt. Pinatubo, April to June, 1927. Crypt.

22184. Dendrobium victoriae-reginae Loher. Loosely hanging small clumps from moss covered tree trunks of the peak region; stems dull green; the spur of the flower lividus, the lower or middle portion of the petals white, otherwise between cyaneus and atroviolaceous -- very showy! Mt. Pinatubo, April to June, 1927. Orchid.

22185. Cyathea loheri Christ. A 5 inch thick tree fern in the peak region; stem earthy brown, crooked; fronds many, horizontally spreading; the stipes toward the base a few inches thick, it with the rachis densely covered with yellowish brown scales; segments heavy, strongly recurved espcially the pinnae which are paler on the lower side; this stocky tree bears an abundance of yellowish brown spores. Mt. Pinatubo, April to June, 1927. Fern.

22186. [No name.] On a Vaccinium species (see specimen number [V. igorotorum? 22248?]). Mt. Pinatubo, April to June, 1927. Crypt.

22187. Medinilla whitfordii Merr. Erect rather rigid shrubs of the peak region; stems quite hard, the branches rigid, erect; leaves ascending, sublucid above, much lighter green beneath; flowers erect, the rose-colored petals horizontally spreading in a rosette fashion; the calyx or young fruit deep red. Mt. Pinatubo, April to June, 1927. Melast.

22188. [No name.] On leaves of host number 22187: Medinilla whitfordii. Mt. Pinatubo, April to June, 1927. [No family stated.]

22189. Acoridium curranii Ames. Dense clumps upon mossy limbs of the peak region; leaves ascending, paler beneath; spikes very slender, also ascending, the versatile flowers golden yellow. Mt. Pinatubo, April to June, 1927. Orchid.

22190. Spathoglottis chrysantha Ames. Small terrestrial tufts in solid black turf ground of open grasses near the base of the peak; bulbs clustered, covered with marcescent sheaths; leaves few, clustered, erect from the bulb, the blades plicate, recurved, paler beneath; flowering stalk erect, purplish tinged, the limp flowers with their stalks, pedicels luteus throughout or in all the parts. Mt. Pinatubo, April to June, 1927. Orchid.

22191. Humata vestita Pr. Creeping upon boulders in dense thickets; rhizomes flexible, freely rebranched; stipes erect, quite stiff; fronds ascending, paler beneath, the segments flat and rigid. Mt. Pinatubo, April to June, 1927. Polypod.

22192. Cyrtandra quisumbingii v. minor Elm. n. var. Laxly branched shrub of the deep cuts of the peak region; stems and crooked branches yellowish, breaking with a snap; leaves mainly horizontal, much lighter green beneath; inflorescence purplish tinged. Mt. Pinatubo, April to June, 1927. Gesner.

22193. Polypodium rhynchophyllum Hook. Creeping along the moss covered branches and trees; rhizomes thin, very flexible, but tightly attached, rebranched, the young tips covered with glistening yellow scales; fronds rigid, erect or nearly so, the stipe very slender but stiff; frond lucid, some paler beneath. Mt. Pinatubo, April to June, 1927. Polypod.

22194. Hedyotis pinatubensis Elm. n. sp. Erect shrubs in the peak shrubberies; stem rather rigid, smooth and gray, the twigs green; leaves ascending or spreading, somewhat paler beneath; corollas white. Mt. Pinatubo, April to June, 1927. Rub.

22195. Viburnum odoratissimum Ker. Rigid coarse shrubs or tree-like of the peak; stem and branches rigid, the whitish wood hard, the grayish white bark smooth; leaves ascending, paler beneath; young infrutescence reddish tinged, erect. Mt. Pinatubo, April to June, 1927. Caprif.

22196. [No name.] On limbs of host number 22195: Viburnum odoratissimum. Mt. Pinatubo, April to June, 1927. Crypt.

22197. Davallia embolostegia Copl. Scattering over wet boulders of ravines; rhizome rigid, short, branched, greenish but densely covered with golden yellow scales; stipes erect, smooth, green, 2 feet long; fronds as long, recurved, soft. Mt. Pinatubo, April to June, 1927. Polypod.

22198. Rhododendron merivelesense H.F. Copl. Very rigid tree-like shrubs in the peak region; stem hard, the erect or ascending twigs stiff; bark coarse, dirty brown; leaves shining above, much paler beneath; flowers soft, ruber red; fruits ascending. Mt. Pinatubo, April to June, 1927. Eric.

22199. Hymenolepis platyrhynchos Kze. Small clumps upon moss covered limbs and inclining tree trunks of the peak vegetation; fronds descending, quite rigid, paler beneath; the fresh spore mass yellow. Mt. Pinatubo, April to June, 1927. Polypod.

22200. Nertera depressa Bnk. & Sol. Masses upon wet moss covered ground of deep or dark cuts; stems and branches green, the flatly spreading leaves paler beneath; flowers greenish erect; berries shining red. Mt. Pinatubo, April to June, 1927. Rub.

22201. Dipteris conjugata Reinw. Scattered in very wet and moss covered thickets of the high alpine region; stipes erect, one yard long, blackish brown, very rigid, smooth; frond halves more or less horizontally spreading, also rigid and smooth, shining above, subglaucous green beneath. Mt. Pinatubo, April to June, 1927. [Fern]

22202. Carex rafflesiana Boott. Terrestrial clumps in the summit region; stems ascending or more spreading. Mt. Pinatubo, April to June, 1927. Cyperac.

22203. [No name.] [On leaves of] either of grasses or sedges of the grass patch near the peak. Mt. Pinatubo, April to June, 1927. Crypt.

22204. [No name.] Dense masses upon inclining tree trunks of the peak; the old stem with foliage yellowish green, the upper foliage very pale green. Mt. Pinatubo, April to June, 1927. Crypt.

22205. [No name.] Forming dense masses at the peak; the lower foliage yellowish or ashy gray, the upper foliage pale green. Mt. Pinatubo, April to June, 1927. Crypt.

22206. Astilbe philippinensis Henry. Here and there in the moss laden ground of the peak; erect stem brownish, the leaves paler beneath, the erect inflorescence white. Mt. Pinatubo, April to June, 1927. Saxifr.

22207. Aegenitia indica Linn. Solitary or few stemmed clusters in turf land hear the peak shrubbery; stems erect, yellowish brown, the downhill facing flowers purplish tinged. Mt. Pinatubo, April to June, 1927. Orobanch.

22208. Polypodium lepidosorium C. Chr. n. sp. Upon wet humus covered stones among thickets; rhizome rigid, short, rebranched, tightly attached; stipes erect, it and the recurved blade rigid, very smooth and sublucid above; the blades simple to forked in both sterile and fertile ones. Note: This species was growing intermixed with number 22209 or Polypodium rupestre Blm., but I found no difficulty in collecting them separately. Mt. Pinatubo, April to June, 1927. Polypod.

22209. Polypodium rupestre Blm. Upon wet stones among dense thickets; rhizomes tightly attached, short rebranched; stipes erect, rigid; the blade quite rigid, more or less recurved toward their tip and paler beneath, lucid above, very smooth; both sterile and fertile ones diverse in size. Mt. Pinatubo, April to June, 1927. Polypod.

22210. Elaphoglossum petiolatum (Sw.). Tufts upon wet humus covered stones in deeply shaded thickets; rhizome bendable, short rebranched; stipes ascending, dull green; fronds much recurved, sublucid and deeper green above; the young sporophylle erect, ashy green on the upper side, the nether surface completely covered with nearly coal black spores. Mt. Pinatubo, April to June, 1927. Polypod.

22211. Callicarpa blancoi Rolfe. Shrub among thickets; stem a few inches thick, soft, covered with yellowing brown bark, laxly rebranched; leaves with recurved tips, much darker green above; flowers pale blue even the filaments of the yellow anthers. Mt. Pinatubo, April to June, 1927. Verben.

22212. Maoutia setosa Wedd. Erect shrub along stony river bed; bark dull brown, easily stripping and strong; lax branches ascending; leaves horizontal, chalky white beneath; inflorescence reddish brown where exposed, soft. Mt. Pinatubo, April to June, 1927. Urtic.

22213. Nephrolepis hirsutula Pr. Wiry clumps in or along the river bed; rhizome very hard, erect, the wiry black roots from above the ground surface; the hard and rigid stipes erect, remaining when old; the frond also erect or somewhat recurved toward the spore bearing tip. Mt. Pinatubo, April to June, 1927. Polypod.

22214. Nephrolepis cordifolia Pr. Along dry ground of ledges or upon its edge; tuftlets with wiry long and slender roots, the rhizome very short or none, the roots with characteristic yellowish brown water bulbets 1/2 inch thick and nearly globose; fronds ascending or more spreading; its rachis usually shining brown and the stipe base rigid. Mt. Pinatubo, April to June, 1927. Polypod.

22215. [No name.] Dense masses in sandy soil among river bed stones; stems erect, dull green foliage. Mt. Pinatubo, April to June, 1927. Crypt.

22216. Rubia philippinensis Elm. n. sp. Trailing among dense thickets of moist ledges along the river; stems long, green, very fragile; branches similar, spreading and forming a tangled mass; flowers erect green or yellowish tinged; the berry nearly black. Mt. Pinatubo, April to June, 1927. Rubiac.

22217. Asplenium laserpitiifolium Lam. Terrestrial tufts in dry soil of wooded ledges along the river; rhizome short, crooked, not rigid nor hard; stipes erect or ascending, shining, blackish brown; fronds much recurved, especially its slenderly pointed segments. Mt. Pinatubo, April to June, 1927. Polypod.

22218. Lycopodium squarrosum Forst. Small bunches along wooded ledges of the river; old stems hanging, biforked once or twice, the young shoots erect and more rigid. Mt. Pinatubo, April to June, 1927. Lycopod.

22220. [No name.] On host number 22219: Sapindaceae [no entry for this collection]. Mt. Pinatubo, April to June, 1927. Crypt.

22221. Stephania exigua Miers. Rambling vines among thickets of dry river ledges; stem 1/2 inch thick, pliable, the branches green; leaves thin, paler beneath; berries green, yellow or red; the inflorescence green. Mt. Pinatubo, April to June, 1927. Menisp.

22223. Pipturus arborescens (Link.). Erect shrub with numerous lax branches, the brown bark tough and easily stripping; along the river bank; leaves descending, much lighter green beneath; fruit clusters dark green, when ripe soft and white. Mt. Pinatubo, April to June, 1927. Urtic.

22224. Dryopteris laucolepis (Pr.) Max. Small terrestrial clumps in wet sandy soil of river banks; root stock very short, thick; stipes ascending, yellowish brown, 1 to 2 feet long, the frond longer and much recurved, its segments likewise recurved; the basal stipe portion covered with pale whitish to brownish colored scales. Mt. Pinatubo, April to June, 1927. Polypod.

22225. Pogostemon williamsii Elm. n. sp. Low shrub along the river bottom; branches crooked, yellowish brown; leaves folded, much paler beneath, very soft; spikes erect, the flowers dark blue. Mt. Pinatubo, April to June, 1927. Labiat.

22226. Gonostegia reptans C.B. Rob. Annual or biennial herbs sprawling over the hot sands along the river; stems and branches reddish brown; leaves much darker green above and sublucid; the small flowers pale white. Mt. Pinatubo, April to June, 1927. Urtic.

22227. Trema philippinensis Elm. n. sp. An erect shrub-like tree in hot river banks; stem widely branched; leaves horizontal or descending and tips recurved, much darker green above; flowers yellowish, the berries green, red to nearly black when ripe. Mt. Pinatubo, April to June, 1927. Ulmac.

22228. Isachne myosotis Nees. Forming dense masses in wet sandy soil along the river bottom among boulders; blades horizontal, flat, pale green but more so beneath; panicle erect, rather old, green. Mt. Pinatubo, April to June, 1927. Gramin.

22229. [No name.] Cleaving along wet boulders near the wet sandy ground or spreading over the ground along the river; laminae pale green, as are the cups. Mt. Pinatubo, April to June, 1927. Crypt.

22230. [No name.] Dense patches in wet sandy ground among thickets, and boulders along the river; the lower layer dark velvety green; the spore stalks erect, lighter green, terminated by a brown whiplash-like tip. Mt. Pinatubo, April to June, 1927. Crypt.

22231. Dianella caerulea Sims. Upon wooded cliffs; old stems hanging downward, the younger ones more erect; the leaves much lighter green beneath; ripe fruits deep wash blue, easily falling. Mt. Pinatubo, April to June, 1927. Liliac.

22232. [No name.] On old leaves of Urticaceae (see specimen number). Cypholophus [moluccanus? 21945?]. Mt. Pinatubo, April to June, 1927. Crypt.

22233. Melastoma pinatubense Elm. n. sp. Among dense thickets of the peak region; bark smooth, yellowish brown; leaves descending with recurved tips, sublucid and much darker green above; flowers erect, the green calyx reflexed, so the pale pink petals; base of anthers light yellow, otherwise purplish. Mt. Pinatubo, April to June, 1927. Melast.

22234. Hymenophyllum eximium Kze. Running upon moss covered limbs and inclining tree trunks of the summit region; stipes ascending, brownish black, the recurved frond very dark green on both sides; quite common. Mt. Pinatubo, April to June, 1927. Fern.

22234a. Hymenophyllum eximium Kze. [no description]. Mt. Pinatubo, April to June, 1927.

22235. Polypodium tenuisectum Blm. Little hanging tufts from moss covered tree trunks and limbs of the elfin woods at 6000 feet elevation; stipes nearly black, the soft fronds a trifle paler beneath, their sori toward the apex only; a very handsome fern, both in the field and as herbarium specimens! Mt. Pinatubo, April to June, 1927. Polypod.

22236. Polypodium celebieum Blm. Tuftlets from inclining moss covered limbs of shrubs and trees; segments of fronds much recurved upon the paler lower surface, especially in dry weather. Note: Many of these delicate ferns of the moss-laden alpine regions curl themselves up during hot dry days, so as to appear quite different from their normal or expanded condition. Mt. Pinatubo, April to June, 1927. Polypod.

22237. Microlepia speluncae Moore. Terrestrial clumps upon wet stony moss covered ground; stems several, erect, smooth and blackish brown, 1 to 2 feet long; rhizome rigid, 1/2 inch thick, black, short rebranched or crooked, smooth; the recurved frond longer than the stipe, sometimes much longer, paler beneath; a common undergrowth fern. Mt. Pinatubo, April to June, 1927. Polypod.

22239. Malaxis longipedunculata Ames. Succulent and terrestrial clumps in wet moss covered regions of the summit; stem green, the ascending leaves slightly paler beneath; spike with rachis and flowers very deep purple or nearly black. Mt. Pinatubo, April to June, 1927. Orchid.

22240. Elatostemma contiguum C.B. Rob. Scattered patches upon wet stones covered with humus and moss of the peak region; stems terete, green or reddish brown; leaves spreading or descending, paler beneath, the larger middle portion yellowish green. Mt. Pinatubo, April to June, 1927. Urtic.

22241. [No name.] Upon damp ledges in very deep cuts of woods in the summit region; the tips of the stems ascendingly curved, the leaflets pale green. Mt. Pinatubo, April to June, 1927. Crypt.

22242. Asplenium falcatum Lam. Tuftlets in moist moss covered jungles of the peak region; stems or fronds ascending, up to 2 feet high, shining dark brown; the segments very much recurved; rhizome quite rigid, curved and crooked, occasionally branched, densely covered with chocolate brown scales. Mt. Pinatubo, April to June, 1927. Polypod.

22243. Lindsaya decomposita Willd. Tuftlets in loose ground of rather shaded or sheltered places by the reclining trees and shrubs overhanging shear drops near the summit; stipes and rachis shining black; the fronds widely spreading, the segments lucid above. Mt. Pinatubo, April to June, 1927. Polypod.

22245. Clethra castanea Elm. n. sp. Stunted trees in the summit shrubberies; twigs ascending; the leaves also ascending, nearly flat, darker green and sublucid on the upper side; spikes erect, ashy green, the corollas white. Mt. Pinatubo, April to June, 1927. Clethrac.

22246. [No name.] On host number 22245: Clethra castanea. Mt. Pinatubo, April to June, 1927. Crypt.

22247. Ligustrum glabrinerve Elm. n. sp. Shrub-like tree in the summit jungles; wood hard; leaves conduplicate, shining above, paler beneath; inflorescence erect, the stalks with calyx green, the corolla white. Mt. Pinatubo, April to June, 1927. Oleac.

22248. Vaccinium igorotorum H. F. Copel. Rigid shrubs or dwarfed trees in the upper or summit region; wood hard or heavy, bark dull brown; branchlets numerous, the young portion reddish tinged when exposed; leaves lucid and much deeper green above; the recurved flowers mostly waxy red. Mt. Pinatubo, April to June, 1927. Eric.

22249. Asplenium normale Don. Tuftlets in dark or sheltered places on ground in the summit region; stipes ascending, shining dark brown or blackish; the fronds scattering and much recurved; segments dark green but especially so above, thin; stipes and rachis slender, similar to those of Adiantum species. Rare in our locality. Mt. Pinatubo, April to June, 1927. Polypod.

22250. Isachne magna Merr. Large clumps in wet fertile soil along the trail up the summit in the humid alpine jungles; stems soft, erect or ascending, 1 to 3 feet long; leaves mostly ascending, flat, slightly paler beneath; panicle erect, pale green, soft as is the foliage. Mt. Pinatubo, April to June, 1927. Gramin.

22251. [No name.] Dense but rather loose clumps upon inclining tree trunks, in the summit jungles; stems yellowish brown toward the base, the green upper portion ascendingly curved. Mt. Pinatubo, April to June, 1927. Crypt.

22252. Boehmeria multiflora C.B. Rob. Shrub along the river flat; wood soft yellowish white, the brown and densely lenticelled bark easily stripping; branches lax, the erect male spikes yellowish green, the 1 foot long fruiting catkins brownish green and pendant. Mt. Pinatubo, April to June, 1927. Urtic.

22255. Cyclophorus lanuginosus (flocciger (Blm.) C. Chr.). Running along the lower surface of boulders in thickets of the river bottom; rhizome quite rigid, long, rebranched; stipes erect, brownish; blades rigid and thick, also erect; the involute margins enclosing a grayish brown woolly matrix. Mt. Pinatubo, April to June, 1927. Polypod.

22256. Odontosoria chinensis (Linn.) J. Sm. Ascending clumps from wet sand-gravelly ground along the base of large boulders of the river; rhizome rigid, short rebranched, crooked, dark brown scale covered; stipes yellowish brown, nearly black and rigid at the base; fronds pale green especially beneath, smooth, from a few inches to a yard in length. Mt. Pinatubo, April to June, 1927. Polypod.

22257. Medinilla pendula Merr. Shrubs in humid moss ridden thickets near wooded bluff of the river neck; stem biforked in branching, the bark yellowish brown; leaves in whorls of 3 to 5, ascending, paler beneath, the young petioles red beneath; infrutescence pendant from stem, 6 inches long at least, the stalks red, the fruits lividus. Mt. Pinatubo, April to June, 1927. Melast.

22258. [No name.] On host number 22257: Medinilla pendula. Mt. Pinatubo, April to June, 1927. Crypt.

22259. Dryopteris ferox (Blm.) O.K. The rankest of this class of terrestrial ferns, clusters upon well shaded surface ledges at the river junction; root stock thick and short; stipes ascending, a yard long, pale green above, brown below, densely beset with dull brown bristles which are especially long and dense toward the base; frond longer than the stipe, dry, pale green, recurved, the segments also recurved. Mt. Pinatubo, April to June, 1927. Polypod.

22260. Polypodium longissimum Blm. Several stemmed terrestrial clumps in shaded seepage places at the neck of the river; rhizome short, thick, rigid, green; stipes suberect, pale green from the base up, smooth; frond ascending, nearly flat and of the same pale green color on both sides; spores in circular packet pouches. Mt. Pinatubo, April to June, 1927. Polypod.

22261. Humata gaimardiana (Gaud.) Pr. Ramifying and cleaving to smooth rock surfaces among thickets along the river bottom; rhizomes glaucous green but covered with brown scales; fronds erect, rigid, yellowish green beneath; quite rare. Mt. Pinatubo, April to June, 1927. Polypod.

22262. [No name.] Large masses plastered upon small boulders of the river neck; plates and caps green, the stalks shining brown to black. Mt. Pinatubo, April to June, 1927. Crypt.

22263. [No name.] Forming dense rounded masses in thickets along the river sides; the upper foliage pale green, yellow to yellowish brown further down. Mt. Pinatubo, April to June, 1927. Crypt.

22264. [No name.] Grayish blue mosses upon the wet ground among thickets near the river. Mt. Pinatubo, April to June, 1927. Crypt.

22265. [No name.] Dense patches upon boulders with thickets near the river; foliage velvety green, the erect fruiting stalks yellowish brown. Mt. Pinatubo, April to June, 1927. Crypt.

22266. [No name.] Small loose clumps about limbs and stems of moist thickets along the river; foliage appearing brown to nearly black. Mt. Pinatubo, April to June, 1927. Crypt.

22267. [No name.] Encircling small stems or limbs of thickets along the river bottom; plates plumbeus, cups dull brown, becoming brittle when dry. Mt. Pinatubo, April to June, 1927. Crypt.

22268. [No name.] Loose masses upon humus covered ground in thickets and stones near river; foliage pale green. Mt. Pinatubo, April to June, 1927. Crypt.

22269. [No name.] Patches upon wet humus covered ground of sheltered embankment along the river; plates plumbeus, rather dry, the strongly recurved tips tawny, the raised plate portion grayish white beneath. Mt. Pinatubo, April to June, 1927. Crypt.

22270. [No name.] Small masses loosely encircling little stems and limbs of thickets along the river; plates flexible, very irregular, blackish, descending, the older lower side coal black and with white spots. Mt. Pinatubo, April to June, 1927. Crypt.

22271. Ficus zambalensis Elm. n. sp. A medium sized tree in dense damp woods; stem 1-1/2 feet thick, widely branched, the smooth bark grayish white; leaves folded, much darker green and sublucid above; figs dull green, clustered immediately below the foliage. Mt. Pinatubo, April to June, 1927. Morac.

22272. Quercus pinatubensis Elm. n. sp. A foot and a half thick tree in heavy woods of a moist pocket; wood rather hard, the gray bark excrescent; leaves ascending, paler beneath, usually folded; the woody branched infrutescence with the young acorns erect. Mt. Pinatubo, April to June, 1927. Fagac.

22274. Ficus nota (Blco.). Stunted tree or coarse erect shrub in river bed; wood soft, the mottled bark excrescent; leaves yellowish green on both sides, nearly flat; figs upon rigid and branched tubercles up to 8 inches long, from stem and main branches. Mt. Pinatubo, April to June, 1927. Morac.

22275. [No name.] On host number 22274: Ficus nota. Mt. Pinatubo, April to June, 1927. Crypt.

22276. Crepis japonica (Linn.). Annuals in wet sandy earth of the river bottom; stems erect, single or several from the base; leaves radically spreading, paler beneath, thin; flowers bright yellow. Mt. Pinatubo, April to June, 1927. Comp.

22277. Deutzia pulchra Vid. Erect shrubs or small crooked trees in thickets along the river; wood hard, the rigid branches yellowish brown bark covered; leaves more or less folded and with strongly recurved tips, grayish green beneath; calyx ashy gray, the segments yellowish so; petals and filaments white, the anthers yellow. Mt. Pinatubo, April to June, 1927. Saxifrag.

22278. Lycopodium cernuum Linn. Rank masses among thickets upon wet ledges along streams; stems occasionally branched, green as are the divaricate branches, dry and pale green, the descending spore bearing tips pale green to yellowish, turning finally brown. Mt. Pinatubo, April to June, 1927. Lycopod.

22279. Dryopteris setigera (Blm.) O.K. Upon ledges of the river cut; root stock thick, rigid, short, covered with nearly black scale-like bristles; stipes erect, 2 feet long, smooth except the scaly base, pale yellowish green; frond much recurved, yellowish green especially beneath. Mt. Pinatubo, April to June, 1927. Polypod.

22280. Dryopteris ligulata (Pr.) O.K. Few stemmed terrestrial clusters in wet ground of a shaded land slide of the river gorge; root stock short, hard, black; stipes ascending, shining, pale green except the black base, up to a yard in length; fronds as long, descending or much recurved, dry, of a dull dark green especially above, the rachis yellowish white. Mt. Pinatubo, April to June, 1927. Polypod.

22281. Dryopteris luzonica Christ. Dense clusters in great masses of a deeply shaded land slide near the river cut; root stock suberect, 1-1/2 inch thick, 6 long; stipes up to a yard long, smooth, green except the black base; fronds as long or longer, much recurved, light green yet paler beneath, curing green; rachis straw brown. Mt. Pinatubo, April to June, 1927. Polypod.

Note: In my distribution of the fern collection into sets a mixture occurred. The stray specimen has its pinnules dissected nearly to the rachilla and may be Dryopteris ligulata (Pr.).

22282. Pteris vittata Linn. Terrestrial clumps in sand-gravelly ground of the river bottom; rhizome short, rigid, covered by yellowish black hairs; the dull brown stipes ascending, 1 to 2 feet long; fronds several, longer than the stipes, gracefully recurved, the basal segments gradually reduced; pinnae dark or dull green. Mt. Pinatubo, April to June, 1927. Polypod.

22283. Dryopteris hispidula (Dcne.)? Terrestrial clumps in wet sandy soil among stones along the river; root stock 2 inches thick, suberect, a half foot long; stipes many, yellowish green or brown, ascending; the frond somewhat recurved, the segments pale or yellowish green beneath. Note: A nice appearing fern with its numerous fronds gracefully recurved and arranged in a rosette-like fashion. Mt. Pinatubo, April to June, 1927. Polypod.

22284. Adiantum diaphanum Blm. Tuftlets of various sizes, upon seepage ledges along a narrow river cut; fronds spreading in a rosette fashion, the longer ones so much recurved as to contact with the ground and a new plant developes, the stipe and rachis shining black; segments flat, thin, pale green on both sides. Number 22284a of this same species is a more robust form. Mt. Pinatubo, April to June, 1927. Polypod.

22285. Selaginella. Little bunches scattered along a seepage ledge of the river cut; stems pale yellowish to brown, the fronds very pale green or yellowish tinged. Mt. Pinatubo, April to June, 1927. Selaginell.

22286. Hymenolepis mucronata Fée. Tufts upon large moss and scale-moss covered boulders of the river bed; rhizome short, hard; fronds erect or ascending, velvety dark green above, much lighter beneath, very rigid at the base; the fertile tips usually recurved. Mt. Pinatubo, April to June, 1927. Polypod.

22287. [No name.] Forming solid dark green masses upon a perpendicular seepage ledge of the river cut. Mt. Pinatubo, April to June, 1927. Crypt.

22288. [No name.] Masses upon humid stones or about the bases of small stems among thickets near the river; stems and lower foliage dull brown, the upper foliage yellow and tips green. Mt. Pinatubo, April to June, 1927. Crypt.

22289. [No name.] Loose masses upon stones and about the ground portion of small stems among thickets; upper foliage rather glossy dark green. Mt. Pinatubo, April to June, 1927. Crypt.

22290. [No name.] Upon the leaves of Hypericum species [lackeyi? 21989?] (see specimen number). Mt. Pinatubo, April to June, 1927. Crypt.

22291. [No name.] Masses upon a fairly decayed piece of hard wood, along thickets of the river; stalks erect, grayish green, the apical portion bright red. Mt. Pinatubo, April to June, 1927. Crypt.

22292. Eurya acuminata (Wall.). Slender shrubs or small trees in deep wooded ravines; whitish wood hard, the smooth bark mottled; leaves recurved, shining upon the more or less folded surface; the subpendant flowers watery white. Mt. Pinatubo, April to June, 1927. Theac.

22293. [No name.] On host number 22292: Eurya acuminata. Mt. Pinatubo, April to June, 1927. Crypt.

22294. Gleichenia linearis (Burm.) Ch. Dense masses in gravelly rather dry soil along stony cuts of open grasslands; rhizomes forming a matrix and covered with dull brown woolly hairs; stipes erect, paler brown than the rhizomes, smooth; frond tips recurved, the segments ascending, rigid, pale or yellowish green but often subglaucous beneath. Mt. Pinatubo, April to June, 1927. Fern.

22295. Glochidion luzonense Elm. Shrubs along the fringe of dense jungled woods; stem hard, the bark longitudinally checked or shredded; leaves descending, much lighter beneath, the edges inclined to curve under the exposed shrubs, the young foliage very pale green. Mt. Pinatubo, April to June, 1927. Euphorb.

22296. Leea euphlebia Merr. Crooked shrubs with few or no branches in thickets bordering the forests or rather woods; leaves spreading, a few feet long, decompound; corymbs terminal and erect, deep red throughout even in the bud state, the inner organs whitish. Mt. Pinatubo, April to June, 1927. Vitac.

22297. Leea quadrifida Merr. Crooked shrubs with one or more stems or single and with few branches; in muddy wooded flats; leaves ascending or horizontal, darker green above; inflorescence terminal, up to 4 inches long, dull green, the inner organs watery white; branches from the base, succulent. Mt. Pinatubo, April to June, 1927. Vitac.

22299. Oxalis repens Thunb. About in the grasslands near the camp; foliage spreading but becoming deflexed when foggy; flowers yellow, the greenish fruit erect. Mt. Pinatubo, April to June, 1927. Oxalid.

22300. [No name.] On host number 22298: Piper [no entry for this number]. Mt. Pinatubo, April to June, 1927. Crypt.

22301. [No name.] On host number 22298: Piper [no entry for this number]. Mt. Pinatubo, April to June, 1927. Crypt.

22302. Chasalia curviflora (Wall.). Rigid undershrub in woods; stem occasionally branched, it with the branches crooked; leaves mostly horizontal, with recurved tips paler beneath; inflorescence erect, the corolla whitish. Mt. Pinatubo, April to June, 1927. Rubiac.

22303. Campium (Leptochilus) diversifolius (Pr.). Small succulent tufts in wet stony and gravelly ground of a steep wooded slope; branched or crooked rhizomes dull green but covered with earthy colored hairs; stipes watery green; fertile fronds more erect; the rather thin dull green sterile blades simple or forked, varying in size. Mt. Pinatubo, April to June, 1927. Polypod.

22304. Dryopteris dissecta (Blm.) O.K. Dense tufts on damp humus covered ground of steep wooded hillsides; root stock 2 inches thick, up to a foot in length; stipes ascending, brownish especially beneath; fronds much paler beneath, also ascending more or less, but the segmented tips recurved. Mt. Pinatubo, April to June, 1927. Polypod.

22305. Polypodium ellipticum Thbg. Small clusters in damp humus covered ground of dense woods; rhizome rigid, crooked, occasionally curved, yellowish green; smooth stipes erect, green to brown; fronds much recurved, somewhat paler beneath; the stitch-like sori linear. Mt. Pinatubo, April to June, 1927. Polypod.

22306. [No name.] On leaves of host (see specimen number of Glochidion [luzonense? 22295?]). Sauropus? Mt. Pinatubo, April to June, 1927. Crypt.

22307. Stenochlaena leptocarpa (Fée) Und. Climbing along the upper side of inclining tree trunks across a very damp deep cut or crawling over huge boulders; rhizome rigid, prickly, very dark green or nearly black, occasionally with long branches; fronds very deep or metallic blue green, strongly recurved; fertile frond toward the apex, heavy, descending or recurved; the basal blades usually simple and long linear. Mt. Pinatubo, April to June, 1927. Polypod.

22309. Casearia luteocarpa Elm. n. sp. Small shrub-like tree in humid wooded flats; wood quite hard, the excrescent bark yellowish and brown mottled; branches many, lax; leaves conduplicate, paler beneath; fruits erect or ascending, luteus; flowers greenish, also erect. Mt. Pinatubo, April to June, 1927. Flacourt.

22310. Cratoxylon celebicum Blm. Small and erect trees in fringe of woods bordering grass fields; wood reddish toward the center, the gray to brown bark longitudinally checked; twigs erect, the folded leaves recurved and paler beneath; flowers deep red, the ascending fruits also red. Mt. Pinatubo, April to June, 1927. Guttif.

22311. [No name.] On lower bark of host number 22310 [Cratoxylon celebicum]; the patches murinus, the cups isabellinus. Mt. Pinatubo, April to June, 1927. Crypt.

22312. Ligustrum glabrinerva Elm. n. sp. Shrub-like tree in wooded border of grasslands; wood quite hard, the smooth bark mottled; leaves lucid and darker green on the upper side, tips much recurved; panicle erect, the stalks pale green, the flowers white. Mt. Pinatubo, April to June, 1927. Oleac.

22313. Aneilema malabaricum (Linn.). Scattered individuals in grass meadows; root fleshy; leaves also fleshy, ascending, grooved upon the upper slightly paler green or rather darker green side; stems and its branches widely spreading, the petals and stamens light blue. Mt. Pinatubo, April to June, 1927. Commelin.

22314. [No name.] On damp ledges near creek bottoms of heavy woods; stems erect or ascending; foliage light green but turning yellowish brown. Mt. Pinatubo, April to June, 1927. Crypt.

22315. Hymenophyllum paniculiflorum Pr. Masses along the lower side of inclining tree trunks; stems or fronds descending, the rhizomes thread-like, the thin pinnae dull green. Mt. Pinatubo, April to June, 1927. Fern.

22316. [No name.] Forming loose masses along tree trunks along densely wooded stream beds; stems handing, freely rebranched, the basal foliage turning straw brown or yellow. Mt. Pinatubo, April to June, 1927. Crypt.

22317. [No name.] Masses along a rough barked tree trunk of a humid stream bed; foliage very soft and finely branched, velvety dark green. Mt. Pinatubo, April to June, 1927. Crypt.

22318. Goniothalamus elmeri Merr. Little but slender tree in moist humid ravines; bark brown, the branches divaricate; leaves similarly spreading, much lighter green beneath; the yellowish to reddish brown fruit clusters mainly from the branches. Mt. Pinatubo, April to June, 1927. Annon.

22319. Loranthus maganda Elm. n. sp. Dense masses upon a Laportea tree in a steep wooded place; stems several, a yard long, freely rebranched; leaves smooth, ascending, much darker green beneath; flowers in great profusion from stem and especially along the branches; corolla miniatus but yellowish toward the apex, the apex itself green; (exceedingly fruity and many small birds feeding upon the flowers). Mt. Pinatubo, April to June, 1927. Loranth.

22320. [No name.] On host number 22318: Goniothalamus elmeri. Mt. Pinatubo, April to June, 1927. Crypt.

22321. [No name.] On leaves of a young shoot of a climbing jungle species belonging to Rutaceae apparently. Cudrania. [Morac.] Mt. Pinatubo, April to June, 1927. Crypt.

22322. [No name.] Upon side of large boulders in open grasslands near the fringe of woods; masses gray, not tightly attached, black beneath. Mt. Pinatubo, April to June, 1927. Crypt.

22323. Scolopia luzonensis (Presl). Small tree near a wooded bluff at the stream bed; wood dingy white, hard, the bark smooth or nearly so and blotched; leaves conduplicate, paler beneath, with strongly recurved tips; infrutescence erect, the stalks green, the fruits green to luteus and finally shining bright red. Mt. Pinatubo, April to June, 1927. Flacourt.

22324. [No name.] On host number 22323: Scolopia luzonensis. Mt. Pinatubo, April to June, 1927. Crypt.

22325. Cyclophorus lanuginosus (floccigera (Blm.) C. Chr.). Ramifying along moss covered inclining tree trunks across a wooded stream bed; rhizomes forming mats, stout, rigid, breaking with a snap; fronds descending, dark green above, yellowish brown and wooly beneath, bendable; the young stipes with circinate blades floccose. Mt. Pinatubo, April to June, 1927. Polypod.

22326. Evodia zambalensis Elm. n. sp. Little slender tree in wooded fringes along the meadows; wood soft, bark smooth and mottled; leaves ascending, folded upon the upper darker green side; inflorescence green except the white corollas. Mt. Pinatubo, April to June, 1927. Rutac.

22327. [No name.] On host number 22326: Evodia zambalensis Elm. Mt. Pinatubo, April to June, 1927. Crypt.

22328. Decaspermum fruticosum Forst. Small crooked tree in a very humid densely wooded stony flat; wood quite hard, the bark checked; the conduplicate leaves much recurved especially the tips, lucid and darker green above; buds yellowish white, the petals white, the stamens lilac except the pale yellow anthers; (quite ornamental in its profusion of flowers). Mt. Pinatubo, April to June, 1927. Myrt.

22329. Selaginella. On moss covered stones in a damp humid flat; stems reddish brown, brittle, the recurved fronds pale or yellowish green, dry in texture. Mt. Pinatubo, April to June, 1927. Selaginell.

22330. Polypodium punctatum L. Clustered upon deeply humus covered stones in dense woods of a steep humid place; rhizome crooked, rebranched, very hard and rigid, short; fronds thick, rigid, ascending, flat, somewhat paler beneath. Mt. Pinatubo, April to June, 1927. Polypod.

22331. Loxogramme blumeana Pr. Clumps upon humid humus covered boulders in woods near a cliff; rhizomes soft, crooked, rebranched, short; fronds not rigid nor succulent, pale or yellowish green beneath, the flattened stipe usually twisted, the margin of the blade wavy. Mt. Pinatubo, April to June, 1927. Polypod.

22332. Polypodium myriocarpum Mett. Creeping upon wet stones and forming scattered clusters; rhizomes not hard; the erect frond recurved toward the apex, thin, not rigid, very dark green above and with a metallic shine; rachis stramineous. Mt. Pinatubo, April to June, 1927. Polypod.

22333. Egenolfia rhizophylla (Kaulf.) Fée. Small tufts in loose talus earth of a deeply shaded nook near a bluff, forming colonies; fruiting fronds or pinnae not found, the dark colored sterile frond recurved until their tips touch the ground and form new plants; the pinnules dull green or of a semi-metallic hue. Mt. Pinatubo, April to June, 1927. Polypod.

22334. Ficus bataanensis Merr. Small tree in wooded stony cut; twigs ascending; leaves erect or ascending, slightly paler beneath, smooth, shining above; figs clustered in the leaf axils, yellow when ripe. Mt. Pinatubo, April to June, 1927. Morac.

22336. Viburnum zambalense Elm. n. sp. Crooked tree or shrub-like in fringe of woods bordering grass planes; branchlets many and crooked; leaves shallowly folded, somewhat paler beneath; erect inflorescence pale green except the creamy white corollas and stamens. Mt. Pinatubo, April to June, 1927. Caprif.

22337. [No name.] Green patches upon smooth barked tree trunks in woods bordering open grass patches; cups yellowish brown. Mt. Pinatubo, April to June, 1927. Crypt.

22338. Fraxinus griffithii Clk. Trees up to 2-1/2 feet in diameter in woods; trunk crooked or irregularly round, widely branched above the middle; bark smooth or scaling in thin plates, gray to brown blotched; wood very hard and strong; young leaves descending, glossy, green on the upper folded side, paler beneath; inflorescence pale green, the flowers yellowish. Mt. Pinatubo, April to June, 1927. Oleac.

22339. Polypodium zippelii? lippelii Blm. Creeping upon ledges or over large boulders in a very humid wooded depression; rhizome branched, crooked, greenish, not hard, nor rigid; fronds quite thick, little recurved, pale green on both sides. Mt. Pinatubo, April to June, 1927. Polypod.

22340. Ficus hauili Blco. A short tree with widely spreading branches along the wooded border of the campus; leaves nearly flat except the recurved tips, sublucid and darker green above, the midrib and lateral nerves whitish; figs pale yellowish green except the darker green ridges. Mt. Pinatubo, April to June, 1927. Morac.

22342. Embelia bulusanensis Elm. A rambling climber among thickets of a deeply wooded cut ravine; branches tough, with short lateral branchlets; leaves rigid, deeply folded, darker on the upper surface; panicle pale or yellowish green. Mt. Pinatubo, April to June, 1927. Myrsin.

22343. Ophioglossum [pendulum?]. Hanging few leafed clumps from the base of a "Dapo" in dense humid thickets of a deep ravine; fronds occasionally branched, dark green, with wavy margins; the spike pendant, rigid, green except the yellow lateral spore packets. Mt. Pinatubo, April to June, 1927. Fern.

Note: Also collected a small single plant in the grass lands with succulent roots, the slender stem with a solitary ovately elliptic leaf and an erect spike.

22344. Osmunda banksiifolia (Pr.) Kuhn. A terrestrial stump fern in wet earth of a nearly precipitous jungle; fronds rigid, dry in texture, many, arranged in a rosette, 1-1/2 yards long, only sterile, the fertile pinnae which are usually scattered in the middle of the frond were not found; only one plant was seen in our region. Mt. Pinatubo, April to June, 1927. Fern.

22345. Vaccinium igorotorum H.F. Copl. Rigid and erect shrub-like tree in wooded ravines; wood hard and heavy, bark smooth and mottled; twigs erect; leaves ascending, gracefully recurved, otherwise flat, much lighter green beneath; the recurved berries shining wine red. Mt. Pinatubo, April to June, 1927. Eric.

22346. Ophiopogon japonicus (Linn.). Clumps among moss and fern covered boulders scattered in open grasslands; foliage descendingly recurved, flat, paler beneath; spikes erect, the white to pale blue flowers subpendant; segments 6, bell-shaped. Mt. Pinatubo, April to June, 1927. Liliac.

22347. Athyrium drepanopteron Moore. Terrestrial clumps or tussocks in turf bordering large boulders of the grasslands; root stock a few inches long, an inch thick or across; stipes not hard nor brittle, pale yellowish green to brown; fronds recurved, the yellow sori turning nearly black when old. Mt. Pinatubo, April to June, 1927. Polypod.

22348. Eragrostis interrupta (R. Br.). Dense tufts in solid turf of grasslands; blades spreading, flat; culms ascending but widely spreading all around; spikes of the panicle divaricate, rather rigid. Mt. Pinatubo, April to June, 1927. Gram.

22349. Hemigraphis primulifolia (Nees). [No description given.] Mt. Pinatubo, April to June, 1927. Acanth.

22350. Andropogon micranthus Klt. Little tufts well scattered in the grasslands; leaves ascending paler beneath, more or less involute; culms ascending, shining, straw colored; panicle yellowish green to purplish brown or red. Mt. Pinatubo, April to June, 1927. Gram.

22351. Cynodon dactylon (Linn.). Forming dense mats in hard soil of the campus; root stocks ramifying, tough, branches, foliage ascending, involute; culms erect and green, the old spikes turning brown. Mt. Pinatubo, April to June, 1927. Gram.

22352. Alloteropsis semialata (R. Br.). Tuftlets in compact ground of the grasslands; foliage divaricately spreading, grayish green but paler beneath; culms nearly erect, when old becoming brownish; spikes also brownish. Mt. Pinatubo, April to June, 1927. Gram.

22353. Andropogon nardus L. Most commonly scattered in all the grassy regions; bunches well set into the compact ground; leaves ascending and recurved, grayish green, somewhat paler beneath, conduplicate; culms ascending or erect, smooth, stramineous. Mt. Pinatubo, April to June, 1927. Gram.

22354. Mariscus cyperinus Vahl. Rather dense clumps quite common in the open grasslands; stems erect, smooth and green; leaves ascending, usually somewhat folded; spikes also green. Mt. Pinatubo, April to June, 1927. Cyper.

22355. Cyperus zollingeri Steud. Compact tuftlets, throughout the grass lands; green stems erect, the leaves spreading and recurved; spikes when young pale yellow, turning brown with age. Mt. Pinatubo, April to June, 1927. Cyper.

22356. Fimbristilis rigidula Nees. Dense tufts in the grasslands; stems ascending; leaves ascending but recurved toward their tips; spikes brown. Mt. Pinatubo, April to June, 1927. Cyper.

22357. Bulbostylis capillaris (Linn.). Small but dense clumps on tuftlets in rich soil upon the campus; leaves pale green, gracefully recurved; culms erect, green, the spikes brownish. Mt. Pinatubo, April to June, 1927. Cyper.

22358. Fimbristylis setacea Benth. Dense masses in black soil of the campus; foliage gracefully recurved, pale green; culms erect or ascending, similarly colored; the erect heads whitish green. Mt. Pinatubo, April to June, 1927. Cyper.

22359. Eragrostis elongata (Willd.). Masses in wet but compact ground of the campus; bunches with many stems which are decumbent at the base; blades recurved, folded, it with the culms grayish green, the spikes more so. Mt. Pinatubo, April to June, 1927. Gram.

22360. [No name.] [No description given.] Mt. Pinatubo, April to June, 1927.

22361. Pratia begonifolia Lindl. Matting wet sandy ground along paths in woods; erect flowers pale purple or bluish tinged; succulent fruits also erect and similarly colored. Mt. Pinatubo, April to June, 1927. Lobel.

22363. Hedyotis tenelliflora Blm. Along trails and scattered in grass lands; stems usually numerous, decumbent at the base, green; leaves divaricate, much paler beneath, edges involute; flowers white. Mt. Pinatubo, April to June, 1927. Rub.

22364. Canarium calophyllum Perk. Small erect tree on a wooded knoll; leaves darker upon the upper folded surface, shining, tips recurved; spikes ascending, the fruits dark green. Mt. Pinatubo, April to June, 1927. Burs.

22365. Kyllinga cylindrica Nees. Forming small or large tufts, well scattered in the grass lands; leaves pale green, spreading; the culms similar in color, erect or ascending; heads green to white. Mt. Pinatubo, April to June, 1927. Cyper.

22367. Pogonatherum paniceum (Lam.). Dense clumps upon the lower side of boulders along the river bottom; stems descending, leaves usually involute, spikes brown or dark golden color. Mt. Pinatubo, April to June, 1927. Gram.

22368. [No name.] On Alyxia species with 3-whorled leaves; climbing and forming a tangled mass in ravine. Mt. Pinatubo, April to June, 1927. Crypt.

22369. [No name.] Forming dense masses over large stones in a densely shaded ravine cut along the water course. Mt. Pinatubo, April to June, 1927. Crypt.

22370. Bulbophyllum dissolutum Ames. Matting and forming dense masses along small tree stems near the ground of a humid wooded gulch; leaves not rigid, recurved and twisted, pseudobulb green; pedicels thread-like, the flower dull yellow with reddish brown center. Mt. Pinatubo, April to June, 1927. Orchid.

22371. Gomphostemma cinerium Elm. Suffrutescent undershrub, in humid woods; stems occasionally branched; leaves spreading, duller green above; white flowers radiate or descendingly curved. Mt. Pinatubo, April to June, 1927. Lab.

22372. Desmodium laxum DC. Suffrutescent plant scattered in dense woods; stems ascending, the leaf and flower bearing portion nearly horizontal, occasionally branched; leaves with recurved tips, much lighter beneath; flowers white. Mt. Pinatubo, April to June, 1927. Leg.

22373. Nephrolepis cordifolia (L.) Pr. Bunches upon tree trunks near the ground of very wet wooded flats; rhizome short, its loose roots wiry and beset with masses of "water eggs" which are yellowish brown and covered with similarly colored hairs or wood covered with ellipsoid and up to an inch long [ed. "rhizome short, its wood or roots wiry and beset with masses of 'water eggs' which are yellowish brown, ellipsoid and up to an inch long"?]; fronds pale green, gracefully recurved. Mt. Pinatubo, April to June, 1927. Polypod.

22374. Medinilla negrito Elm. n. sp. Shrub along streams in a dense and deeply wooded cut; wood yellowish, the bark shredded; inflorescence green except the pale pink flowers; leaves much lighter green beneath, sublucid above, flat but tips recurved; fruits of infrutescence deep red. Mt. Pinatubo, April to June, 1927. Melast.

22375. Athyrium mollifrons C. Chr. n. sp. Tussocks in very wet ground of loose soil mixed with stones along the creek of a deep very humid cut; root stock or stump 6 inches tnick by a foot long; fronds succulent, widely spreading and tips recurved, paler beneath; stipe ascending, a yard long, 1 inches or more thick at the base where it is blackish brown and beset with similarly colored scales, dull green toward the equally long or longer frond, deeply channelled along the upper side; the membranous lamina green when dry. Mt. Pinatubo, April to June, 1927. Polypod.

22376. Osbeckia chinensis Linn. Herbs from woody roots, scattered in grass lands; old stems yellowish brown; leaves recurved, curvingly folded upon the upper darker surface; flowers showy, light lilac, stamens bright yellow. Mt. Pinatubo, April to June, 1927. Melast.

22377. Callicarpa magna lilacina Elm. n. var. A foot thick tree in wet and very humid densely wooded flats; leaves with recurved tips, yellowish green beneath; flowers deep blue, the bud inflorescence blackish brown. Mt. Pinatubo, April to June, 1927. Verben.

22379. Clerodendron philippinense Elm. n. sp. Lax shrub or tree-like in humid woods; wood soft, white, the bark tubercled earthy colored; leaves horizontally spreading, much paler beneath; young twigs, petioles and inflorescence velvety lividus, the flowers white. Mt. Pinatubo, April to June, 1927. Verben.

22381. [No name.] On host number 22377: Callicarpa magna var. lilacina. Mt. Pinatubo, April to June, 1927. Crypt.

22382. Dactyloctenium aegyptium (Linn.). Introduced and forming large clumps in rich soils of the campus; stems light green, decumbent and taking root at the lower joints; leaves ascending, with recurved tips; spikes divaricate, dull green to brown. Mt. Pinatubo, April to June, 1927. Gram.

22383. Setaria geniculata (Lam.). Small tufts scattered among other glumaceous plants; stems several, decumbent; leaves ascending; culms erect or nearly so, the spikes yellow to dull brown. Mt. Pinatubo, April to June, 1927. Gram.

22384. Digitaria longiflora (Gmel.). Masses with running root stocks upon the campus; leaves erect or ascending, flat; culms mostly erect, greenish brown; spikes pale green. Mt. Pinatubo, April to June, 1927. Gram.

22385. Eleusine indica Gaertn. Dense clumps introduced upon the campus; culms very light green and compressed toward the base, branched; spikes divaricate, lighter green beneath. Mt. Pinatubo, April to June, 1927. Gram.

22386. [No name.] Dense masses upon large boulders in the grasslands and among stunted shrubs; foliage yellowish brown, the old stems dull brown. Mt. Pinatubo, April to June, 1927. Crypt.

22387. Fraxinus griffithii Clk. A hard-wood tree in wooded ravines; bark smooth, grayish white; leaflets descending, paler beneath, soft; whitish flowers upon a lax and pale green panicle. Mt. Pinatubo, April to June, 1927. Oleac.

22388. Drosera peltata Smith. Patches in compact soil of elevated or well drained grasslands; stems single or 2 or 3-clustered, erect, scattered, green; the divaricate "insect-catchers" yellowish green and sticky (laden with water in early morning or after rain); flowers or petals rather pure white, facing the sky. Mt. Pinatubo, April to June, 1927. Droserac.

22389. [No name.] In turf of grasslands of the campus; on young foliage of Cyperaceae or Graminae. (Glumaceae) Mt. Pinatubo, April to June, 1927. Crypt.

22395. Radermachera sorsogonensis Elm. Small 6 inches thick tree on steep wooded ravines along the river; wood quite hard and whitish; the gray bark checked; leaves deep folded, paler beneath; the pendant fruits pale, green, rigid; usually in terminal panicles. Mt. Pinatubo, April to June, 1927. Bignon.

22672 and 22673 blank.

22692. Freycinetia brevifolia Elm. n. sp. On mountain ridge at 3500 feet altitude. Camp Labi, March 1937. Pandan.

22693. Gynura labii Elm. n. sp. Leaves flat, leathery, much paler green and sometimes purplish beneath; stems few to several from the root tussock, erect, generally terete but conspciuously ridged or fluted longitudinally, mostly purple, the branches of the inflorescence terete and green; foliaceous bracts green, pistils ochraceus, involucre also green, perianth vinosus; achenes very pale green, the slender tubes more yellowish green; pappus soft silvery white; the same inflorescence bears yellow and red flowers -- quite pretty. Camp Labi, March 15, 1937. Comp.

22694. Mussaenda milleri Elm. n. sp. On mountain ridge at 3500 feet altitude. Camp Labi, March, 1937. Rub.